



# ***The Resonator***

**Official Newsletter of The Fair Lawn (NJ) Amateur Radio Club**

**Volume 5, Number 9**

**[www.FairLawnARC.org](http://www.FairLawnARC.org)**

**September 2020**

## **From The President:**

Dear members,

The month of August was of great activity for FLARC. We were able to re-establish our VE Testing by having our first "outdoor/in-vehicle" session, which worked out beautifully and was conducted in a safe and secure manner. Congratulations to the FLARC VE Team for a job well done. Also, we needed to go out and have some fun. Thanks to Karl W2KBF and John W2JLH, on August 22 we went out to have our first "mobile" Fox Hunt. We had great participation and it was lots of fun. Check this issue of The Resonator for more information and pictures of the event. Also, "staying outdoors" Noel W2MSA brought us a very interesting Kawfee Tawk about Parks on the Air (POTA). It was a very well attended Zoom presentation along with excellent guests and great information on how to activate parks in our area and beyond. From this presentation, a new special interest group is born at FLARC; now we will have a PortableOps SIG, so stay tuned for more information on it. And even through these different times, our membership continues to grow. This month, several new members joined the ranks of our beloved club.

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## **New Member Profile**

**NAME:** Gregg Childers

**CALL:** N2ECH

### **What do you do/what did you do for a living?**

I am partner in Sector Micro Computer, Inc. I started the company with my partner in 1987. We began by writing a custom software package that began as a project to automate the accounting and data management of smaller travel agencies. We expanded our software over the years, growing from what started as automating local travel agencies to current clients that are some of the largest corporate travel companies in the United States.

I also spend much of my time day trading. This began as an investment / hobby but as my trading education matured, it became something that I not only enjoy but is challenging and very profitable. I am fortunate enough to have a mentor that is the head quant trader for one of the largest banks in the world.

### **How did you get interested in ham radio?**

Since I was 7 or 8 years old, I had a love for electronics. I would build flashlights and as I got older learned how to solder. I enjoyed putting circuit boards together and making small projects. I have owned a scanner from the age of 10 listening to the local police since back when you were limited by crystals! I probably had a new one on my gift list every year as I grew up - and I still look at anything newly release to this day. I still remember purchasing my first cell phone for \$1800.00 when they first came out.

Back in 1982 I met a friend that was a Naval Officer. He worked on a ship and would be away for months at a time. We began talking one day about ship communications and Morse code. He challenged me to learn and get my Technician License. I remember spending days and nights with posters on my bedroom walls trying to learn Morse code! I finally passed the test in January of 1983. My first 2 Meter radio was a Kenwood TR-2500 that still sits on the shelf in my shack today.

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Fellow FLARC Members,

As we all know, the coronavirus continues to be top of the news and that the club is closed until further notice. Out of an overabundance of caution and our care for your safety, all FLARC events are postponed until further notice due to COVID-19.

Check in on our nightly health and welfare net on the W2NPT repeater at 7:00 PM and let us know how you're doing. You may be isolated at this time but you are not alone. Stay safe!

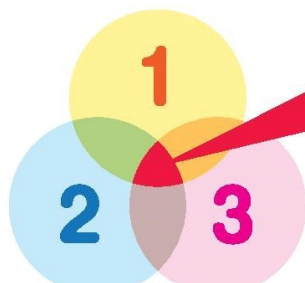
.....  
**Important notice for preventing COVID-19 outbreaks.**  
.....

# Avoid the "Three Cs"!

- 1. Closed spaces** with poor ventilation.
- 2. Crowded places** with many people nearby.
- 3. Close-contact settings** such as close-range conversations.



.....  
**One of the key measures against COVID-19 is to prevent occurrence of clusters.**  
.....  
Keep these "Three Cs" from overlapping in daily life.



**The risk of occurrence of clusters is particularly high when the "Three Cs" overlap!**

In addition to the "Three Cs," **items used by multiple people** should be cleaned with disinfectant.

Source: [www.mhlw.go.jp](http://www.mhlw.go.jp)

Nomar NP4H -- July 1, 2020

**The Club** Fair Lawn ARC is the fastest growing ham club around, with five operating positions in a permanent clubhouse. Visitors and guests are always welcome. The club is open every Friday night from NLT 6:30 PM. Business meetings are the first Friday of the month at 7:30PM.

*2020 Officers, Committees and Assignments*

<b>President</b>	<b>Nomar Vizcarrando</b>	<b>NP4H</b>
<b>Vice President</b>	<b>John L. Howard</b>	<b>W2JLH</b>
<b>Treasurer</b>	<b>Al Rasmussen</b>	<b>WA2OWL</b>
<b>Secretary</b>	<b>Randy Smith</b>	<b>WU2S</b>
<b>Trustee</b>	<b>Skip Barker</b>	<b>KD2BRV</b>
<b>Trustee</b>	<b>Ed Efchak</b>	<b>WX2R</b>
<b>Trustee</b>	<b>Don Cassarini</b>	<b>N2PRT</b>
<b>Field Day</b>	<b>Steve Wraga</b>	<b>WA2BYX</b>
<b>Member Services</b>	<b>Judith Shaw</b>	<b>KC2LTM</b>
<b>Publicity</b>	<b>Ed Efchak</b>	<b>WX2R</b>
<b>Publicity</b>	<b>Gene Ottenheimer</b>	<b>WO2W</b>
<b>Publicity</b>	<b>Judith Shaw</b>	<b>KC2LTM</b>
<b>Publicity</b>	<b>Susan Frank</b>	<b>W6SKT</b>
<b>Program</b>	<b>Lowell Vant Slot</b>	<b>W2DLT</b>
<b>Publicity</b>	<b>Karl Frank</b>	<b>W2KBF</b>
<b>Publicity</b>	<b>Nomar Vizcarrando</b> <i>(ex officio)</i>	<b>NP4H</b>
<b>Social Media</b>	<b>Dave Marotti</b>	<b>NK2Q</b>
<b>Video/YouTube</b>	<b>Thom Guida</b>	<b>W2NZ</b>
<b>VE Liaison</b>	<b>Gene Ottenheimer</b>	<b>WO2W</b>
<b>VE Liaison</b>	<b>Pete Senesi</b>	<b>KD2BMX</b>
<b>Education</b>	<b>Gordon Beattie</b>	<b>W2TTT</b>
<b>Education</b>	<b>Randy Smith</b>	<b>WU2S</b>
<b>Education</b>	<b>John L. Howard</b>	<b>K2JLH</b>
<b>Education</b>	<b>Fred Wawra</b>	<b>W2ABE</b>
<b>History</b>	<b>Fred Belghaus</b>	<b>W2AAB</b>
<b>Health and Welfare</b>	<b>Judith Shaw</b>	<b>KC2LTM</b>
<b>Photographer</b>	<b>Don Cassarini</b>	<b>N2PRT</b>
<b>W2NPT Trustee</b>	<b>Paul Cornett</b>	<b>W2IP</b>
<b>Technical</b>	<b>Paul Cornett</b>	<b>W2IP</b>
<b>Technical</b>	<b>Randy Smith</b>	<b>WU2S</b>
<b>Technical</b>	<b>Fred Wawra</b>	<b>W2ABE</b>
<b>RACES Director</b>	<b>Dave Gotlib</b>	<b>KD2MOB</b>
<b>RACES Liaison</b>	<b>Steve Wraga</b>	<b>WA2BYX</b>
<b>Newsletter Editor</b>	<b>Ed Efchak</b>	<b>WX2R</b>
<b>FL Town Liaison</b>	<b>Gene Ottenheimer</b>	<b>WO2W</b>
<b>Net Scheduler</b>	<b>Brian Cirulnick</b>	<b>KD2KLN</b>
<b>Quartermaster</b>	<b>Brian Cirulnick</b>	<b>KD2KLN</b>

## Fair Lawn RACES/ARES Corner



Summer is unofficially over and soon it will be officially over and with that, hurricane season continues on and FL-ARES is ready to assist other ARES groups such as Bergen County ARES and Passaic County ARES during the Hurricane Season. I would like to personally thank the stations which assisted FL-ARES during Tropical Storm Isaias.

Please note the new time of the FL-ARES KB2FLA Nets. They are now taking place on Wednesdays at 2000 hours on the FLARC and NJ2BS Repeaters. Please join us every Wednesday for any updates, messages or activities which may take place.

You may or may not be aware that the W2NPT Repeater is now linked to the NJ2BS Repeater through KD2BKD-L on Echolink. With the new link, our footprint in Bergen County as well as the surrounding area on the 2 meter band has expanded! A special thanks goes out to Gordon W2TTT who owns the NJ2BS Repeater and Bob KD2BKD for linking the repeaters. Also, a thank you goes to Paul W2IP for making it happen on the W2NPT end.

The Fair Lawn ARC Repeater info is: RX 145.47 MHz / TX 144.87, PL Tone 167.9 Hz. Echolink W2NPT-R.  
The NJ2BS Repeater info is: RX 146.835 MHz / TX 146.235, PL Tone 151.4 Hz. Echolink KD2BKD-L.

FL-ARES would like to thank the FLARC for the use of its repeater as well as the Venture Crew 73 73 Club for the use of their repeater.

We are fortunate to make Fair Lawn and the surrounding communities our home. With our leadership and support from the FLARC we can grow and be of assistance in many community events. We are always seeking new members to join FL-ARES.

The Fair Lawn Night Out has been postponed until October. More details will follow in the October Resonator edition and via email.

*Continued on page 47*

## MASTER EVENT CALENDAR

Out of an overabundance of caution and our care for your safety, (not to mention state law)  
all FLARC events are postponed or rescheduled until further notice due to COVID-19.

- September 18, 2020 Kawfee Tawk: "Radio and Amelia Earhart" by John W2JLH  
October 18, 2020 Fair Lawn Fall Street Fair (River Road) **(Tentative)**  
November 27, 2020 FLARC Auction (Senior Center) **(Tentative)**  
December 18, 2020 Kawfee Tawk: Ria Jairam N2RJ "The State Of The ARRL At Year End"  
TBD Return Visit To iHeartRadio/WSUS transmitter  
TBD Field Trip to Sarnoff Center, Princeton  
\*\* 2nd Friday of month



## More Than A Club... A Community Of Friends!



Hidetsugu Yagi's 130th Birthday Google Doodle

### FLARC VEC Exams

Our next test sessions are scheduled September 12th beginning at 08:30 at the Recycling Center. Advanced registration is required. The fee is \$15.00 (cash only).

**SEE PAGE 9 FOR FULL DETAILS.**

### Follow FLARC ON THE WEB

**Facebook:** <http://facebook.FairLawnARC.org>

**Twitter:** @FairLawnARC

**Blog:** <http://blog.FairLawnARC.org>

**Youtube:** <http://youtube.FairLawnARC.org>

**Website:** <http://FairLawnARC.org>

Please bring positive identification (license, passport, etc.), your original license and a copy, original CSCE and a copy (if credit is needed).

The full exam schedule is on the club calendar at the FairLawnARC.org website. For further information contact [VE-Liason@FairLawnARC.org](mailto:VE-Liason@FairLawnARC.org).

Please refer also to the "License Exams" link on the main website--

<http://bit.ly/FLARC-Testing>



## Interested in Chasing DX?

A casual group of FLARCs including Van W2DLT, John KD2NRS, Brad KM2C, Karl W2KBF, Nomar NP4H, Steve WI2W, Jim W2JC, Larry WA2ALY and Fred W2AAB have formed an email group to keep each other in touch in (real) time of when the rare or interesting ones show up to chase.

Interested? See or contact Van W2DLT.

## New Portable Operations SIG Formed !

Noel W2MSA has stepped forward and offered to create and lead a Special Interest Group (SIG) on portable operations, such as Parks on the Air (POTA). This group is open to all members of the FLARC groups.io group, regardless of experience.

Contact him at [noelw2msa@gmail.com](mailto:noelw2msa@gmail.com) for more information on joining.

Or just go to the club website [FairLawnARC.org](http://FairLawnARC.org) and use the "Join Special Interest Group(s)" link on left.

## Equipment Problem?

If you encounter a piece of club equipment, instrument or tool that is not working correctly or is broken in any way, we now have a Trouble Report form that you can use to describe the problem and report it to the Technical Committee -- who will arrange for repair.

## 2020 — The Year of (Distance) Learning!



Brad KM2C talks through the Flex equipment to kick off the Year of Learning back on January 10<sup>th</sup>

## Please Note: Operating at W2NPT

Starting in January 2019 club trustees have sign-in sheets for all operating positions. There is a clipboard at Operating Position #1, #2 (digital) and #4 with a form on which to sign up for half-hour time slots. No longer first come-first served, in fairness to all who want to use our club equipment and the new antennas.

All we need now is permission to hang out at the Rec Center.

## Get Direct With FLARC!

Here is a direct link to specific club info: just a click away!

<http://apparel.FairLawnARC.org>  
<http://auction.FairLawnARC.org>  
<http://blog.FairLawnARC.org>  
<http://calendar.FairLawnARC.org>  
<http://events.FairLawnARC.org>  
<http://exams.FairLawnARC.org>  
<http://facebook.FairLawnARC.org>  
<http://news.FairLawnARC.org>  
<http://swap.FairLawnARC.org>  
<http://tech.FairLawnARC.org>  
<http://youtube.FairLawnARC.org>

**NEW !**

<https://groups.io/g/FairLawnARC>



## August 2020 Blog Traffic

With coronavirus dominating the news, both visitors and page views to the blog were down this month. We've also done more email and groups.io to members.

	August 2020	August 2019	% Change
Views	241	451	-47%
Visitors	117	233	-49%
Posts	5	4	+25%

There is new content nearly every day so it's really worth the look at both [FairLawnARC.org](http://FairLawnARC.org) and the blog.

<http://blog.FairLawnARC.org>

## September 2020 Near and Far Net Controls

Here is the roster for net controls for the upcoming month as reported by Brian KD2KLN:

Date	Net Control
September 7 [holiday]	KD2KLN
September 14	KD2MOB
September 21	you ?
September 28	N2AAM

The *Near and Far Net* had Patrick JS6UGC in Okinawa check in this month...our most distant yet.

But we need more volunteers to be net controls - if everyone takes their turn it's less burden on the others. And it's easy.

Volunteer --- don't wait to be asked (unless you really want to be flattered).

## Ham Radio Is Contagious And It Won't Make You Sick!!

### Ed-itorial: Is the Future of FLARC Outside of FLARC?

This has certainly been a summer of uncertainty. The longer the clubhouse lockdown lasts, the more uncertain the ability of the club to make plans. I know you're getting restless to get together and do things, but it looks like the club may be closed through year-end, and if not, only open to small groups at a time.

We want to get back to doing things and maybe the best way is to self-organize for the meantime. The August foxhunt is a good idea. Pulling together small SIGs and self-organizing is another. The clubhouse need not be the focal point.

Technology, a determination to "meet" with others, personal initiative and creativity will get us through this. The club will not be the same, no matter what. It is how we start to change it now that will set the course for the future.

DE Ed WX2R

## Club Apparel — Get Them While They're **RED**!

Club apparel is always in vogue. Red is always "in" and your club friends all have them... you *want* a shirt or jacket for the next FLARC event! Great for Field Day!

Don't forget.... they're easy to order.

Go to [www.hamthreads.com](http://www.hamthreads.com)

or visit <http://apparel.FairLawnARC.org>

Check out the item selection that is posted on the FLARC website (with pictures and prices). Order the shirts or other items you want with either the regular FLARC logo or the still-cool 60th anniversary logo. Note: **RED** is the primary and preferred club standard shirt color.

And why not WEAR your nice red shirt when you come to the club, especially for meetings and events.



Large-shirted man in extra-large shirt.  
Ed WX2R has dropped 30 pounds since February

## 2020 FLARC Speaker Series Locations:

***SPEAKERS WHO ARE FLARC MEMBERS:***  
**FLARC CLUBHOUSE**

***SPEAKERS WHO ARE INVITED GUESTS:***  
**FAIR LAWN SENIOR CENTER**

## Help Wanted

The Publicity Committee is looking for some new members to help continue to improve the marketing and promotion of the club, its activities and amateur radio. This is an active group so a willingness to participate is a strong plus. Experience in digital marketing and/or public relations is a plus.

Call Ed WX2R at 802-282-6700 or email him at [wx2r@arrrl.net](mailto:wx2r@arrrl.net) if you're interested.

## Thanks To All For Rejoining FLARC In 2020!!

### BEQUEATHS AND DONATIONS

Planned gifts usually imply the family donation of amateur equipment to the club when someone has become a Silent Key. But it can be more. Club members might consider making a gift through a will or trust; gifts that help provide lifetime income to the club. Consult with your lawyer, estate planner or tax advisor if you feel such a gift is worthy.

## About The Club

*The Resonator* is published monthly and is the official (and only) newsletter of The Fair Lawn Amateur Radio Club. FLARC was established in 1956 and has met continuously since inception. **The club is sponsored by the Borough of Fair Lawn.** The club meets every Friday at 6PM at the club station in The Fair Lawn Community Center, 10-10 20th Street, Fair Lawn, NJ. Business meetings are the first Friday of the month at 7:30 PM.

Visitors **ARE ALWAYS** welcome at our meetings.

FLARC operates the W2NPT repeater (145.470- PL 167.9) located high atop the Community Center. The analog repeater is open to all amateurs for use without restrictions.

The club has over one hundred paid members. Dues are currently \$25 per year/\$20 for new members.

For more information, please see our website, at <http://membership.FairLawnARC.org>

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## Note of Thanks

The club wishes to thank all who helped out Van W2DLT on August 27<sup>th</sup> to help Norm ex-K2IJD move into a new QTH and transition him and his gear safely. That is what "health and welfare" is all about. Thanks to all who helped.

Norm would be delighted to receive phone calls from club members - contact Van W2DLT for Norm's phone number.

## PUBLICITY COMMITTEE NEWS

The Publicity Committee is seeking new members to help grow the club with its varied activities. Enthusiasm desired... no experience necessary. Contact Ed WX2R or any other committee member.



## FAIR LAWN'S COMMUNICATIONS CENTER! *With New Antennas On The Roof!*



## 2020 Near and Far Net Check-In's

Now in its third year, the FLARC *Near and Far* net is chugging along each week. Here is list of our check-ins beginning on New Year's Night in no particular order. Mondays at 8PM on the repeater.

Call	Name
N2AAM	Dave
WO2W	Gene
W2DLT	Van
KD2MOB	Dave
W2JC	Jim
WI2W	Steve
N2SU	Bob
N2OEL	Noel
WX2R	Ed
W2AAB	Fred
KD2KLN	Brian
W2MSA	Noel
W2KBF	Karl
AC2ZU	Charlie
W3EH	George
KC2TBD	Ron
TG9AOR	Joe
N2OEL	Noel
N2JLF	Jim
W2TAB	Tom
KC2TBD	Ron
KA2YRA	Steve
WA2BYX	Steve
KD2BKD	Bob
KC2K	Stan
KA2YRA	Steve
WA2CCN	Hank
W2TTT	Gordon
NJ8Y	Ahmed
NJ2BK	Bruce
W2CQX	Dan
W2KNG	Jim
WK2T	Lee
W2NZ	Thom
K2PD	Don
KD2JIP	Dave
K2ZVL	Van
KC2ASA	Peter
W2AAB	Fred
KD2LRX	Jason
K3DQP	Walt
KD2TVZ	Ed

## 2019-20 Member Profiles

The year is now complete and here is a list of the 2019 monthly profiles. See past profiles elsewhere in *The Resonator* to check back in the archives to see each featured member's background.

Month	Name	Call Sign
January 2019	Dave	KD2JIP
February	Jim	K2ZO
March	Zach	KC2RSS
April	Bob	N2SU
May	Stan	KC2K
June	Steve	WA2BYX
July	Roger	K2RRB
August	Judith	KC2LTM
September	Chris	W2TU
October	Bob	N2SU
November	Bob	WA2ISE
December	Carol	KD2NMV
January 2020	Gordon	W2TTT
February	Chris	KD2JQZ
March	Glenn	KD2MDR
April	Steve	K2SAB
May	Ahmed	NJ8Y
June	Charlie	AC2ZU
July	Jim	N2JLF
August	Walt	K3DQB
September	Gregg	N2ECH

## Congratulations!

The August VE testing session was a success despite the corononavirus pandemic. See test session results elsewhere .

**SEE TESTING DETAILS FOR SEPTEMBER ON PAGE 10 IN THIS ISSUE!!**

Name	Call	New License
No activity		





## Past FLARC Member Profiles

Here is a list of past member features and we welcome your recommendations for new profiles -- including your own.

Month	Name	Call Sign
January 2016	Pete	KB2BMX
February	Marco	KC2ZMA
March	Ron	KC2TBD
April	Kai	K2TRW
May	Larry	WA2ALY
June	Dave	N8MAR
July	Steve	W12W
August	Thom	W2NZ
September	Brian	KD2KLN
October	Brad	KM2C
November	Al	WA2OWL
December	George	W3EH
January 2017	Fred	W2ABE
February	Dave	KD2MOB
March	Randy	WU2S
April	Lee	KD2DRS
May	Gene	WO2W
June	Carol	KD2NMV
July	Kevin	KC2KCC
August	Robert	KD2NOG
September	Robert	KD2BKD
October	John	KD2NRS
November	Fred	W2AAB
December	Margaret	W2GB
January 2018	Brian	KD2OAZ
February	Bennett	KO2OK
March	Van	W2DLT
April	Aly	ALØY
May	Bruce	NJ2BK
June	Dave	N2AAM
July	Karl and Susan	W2KBF and W2SKT
August	Steve	KA2YRA
September	Paul	K2PJC
October	Skip	KD2BRV
November	Jim	W2JC
December	Tom	N2AAX

By the way, Randy (WU2S) has compiled a binder of all back issues of *The Resonator* and it's located in the club office. Thanks Randy!!!

## Blood Donors Needed In This Time Of Emergency

The Red Cross and related organizations are in great need for blood donations since most corporate blood drives have been cancelled.

[Communitybloodservices.com](http://Communitybloodservices.com) has a network of offices open during the week and would really welcome folks making appointments to donate blood.

Thanks!



# American Red Cross

## President's Message, continued

As I mentioned last month, FLARC does not sleep. We always have something for our members. I truly think it is important that we offer our membership different ways to connect, learn, have fun, and stay busy.

Very soon we will continue to bring you events where we can join again, following all necessary health and safety guidelines. We are looking to have another "mobile" fox hunt, portable day at the park and more. If you have any ideas that we can execute safely, drop me a note at [np4h@arrl.net](mailto:np4h@arrl.net) and we'll definitely look into it. Remember, this is your club - let's continue to make it the best in New Jersey.

Continue to stay safe and healthy, blessings to all and "I'll see you on the radio"!

73,  
Nomar, NP4H



## SPECIAL RELEASE:

### AMATEUR RADIO TESTING AT THE FAIR LAWN AMATEUR RADIO CLUB

On September 12, 2020, Fair Lawn Amateur Radio Club will continue amateur radio test sessions on a trial basis. These sessions will be held in the commuter parking lot of the **Fair Lawn Recycling Center**. The location is at **19-25 Saddle River Road, Fair Lawn, NJ 07410**. Inclement weather will cancel testing.

There will be two sessions each day. Session 1 is at 09:00 AM and session 2 starts at 10:15 AM.

**A document will be provided to you prior to the date to indicate the session assigned to you.**

You must have it with you to take the test. When you arrive, please tune your FM radio to 87.9 so you can listen to instructions.

#### Prior to Testing:

Send an email to [wo2w@arrl.net](mailto:wo2w@arrl.net) requesting to book your spot.

#### Upon Arrival:

**Stay in your vehicle** as you will be directed to an assigned parking space.

**Expect to remain in your vehicle for the duration. (Note NO BATHROOMS ARE AVAILABLE).**

You must have a government issued ID such as a valid driver's license or passport, and **3 completed copies of the FCC CSCE form**.

#### Please Bring With You:

- **You MUST bring and WEAR personal PPE items including a face mask, and gloves.**
- 2 pens and 2 pencils. None will be provided to you, due to possible virus transmission.
- A clipboard or a hard surface to write on and which will be visible to the volunteer examiners.
- **Your FRN number, and (if licensed) a copy of your ham license or a valid CSCE (Certificate of Successful Completion Exam).**
- **A completed form 605 (which will be sent to you ahead of your test session)**
- Additionally, the **\$15.00 exam fee**. This is payable in cash (exact amount is a must).

#### The Testing Procedure:

- Testing will be performed in your personal vehicle. **You must remain in your vehicle for the duration of the event.**
- Only the candidate being tested may remain in the vehicle -- **do not bring any passengers or supporters with you.**
- Please clear front area of vehicle of all paperwork, computers, cell phones, etc. - anything which could be used to hold answers to test questions. **Turn off cell phones and place in glove box or out of reach.**
- **Windows must be rolled down** an inch or two so proctors can hear inside the vehicle.
- A masked/gloved Volunteer Examiner will be handing out and picking up tests from each vehicle.  
**The Volunteer examiner must be able to see you during the whole test.** If at any time you feel unsafe, please feel free to abort the test, return the test materials and safely leave the testing area.
- Let's protect each other.... and good luck!
- For information and scheduling, please contact:
- Gene/WO2W
- [WO2W@arrl.net](mailto:WO2W@arrl.net)
- Visit our website at [www.FairLawnARC.org](http://www.FairLawnARC.org)

## N2ECH Member Profile, continued

After graduating from college in 1983, life was distracted by my career, marriage and kids! My hobbies took a back seat on the priority list to raising a family. Now that I have time again and the Covid-19 hit, I'm doing my best to catch up with the latest in HAM Radio.

I purchased a Yaesu FTM-400XDR/DE, ICOM ID-51, Anytone AT-D878UV and a Radioddity GD-77. Hopefully this is enough to introduce myself to the digital world. I now plan on upgrading my license and trying to get into the HF Bands as well.

### What parts of the hobby most interest you?

Everything about the HAM world intrigues me. The fact that voice and data can travel for great distances is just amazing. Recently learning about DMR and learning to setup my ZUMSpot with Pi-Star and my OpenSpot 3 to work via the internet brought me back to being a kid again.

### What does belonging to FLARC mean to you?

#### How do you/can you better contribute to the club?

FLARC was the best thing that happened to me as far as re-entering the world of HAM Radio. I knew there was so much to learn and how better to do it than finding a club that is unbelievably helpful and warm welcoming. I never felt so accepted by a bunch of guys. I was hesitant at first and spoke privately with Dave KD2MOB, and received the warmest welcome and assurance that this was the best club and that I was more than welcome to join.

The Health and Welfare Net each night was such an insight to the dedication of what the club was all about. Then to top it off, I received a personal phone call one day just to check to see if I was OK because I hadn't been on the air in a few days. This was unbelievable! The past 5 months with the club have been a joy.

From the monthly virtual business meetings, Kawfee Tawks and every day of "on air" learning has been such a positive experience. I'm not sure yet what I can contribute to the club since the wealth of knowledge already there is overwhelming. I do believe in paying it forward so hopefully in the future I can find a way to contribute.

*Continued on page 41*

## August 8<sup>th</sup> and August 22<sup>nd</sup> 2020 VE Testing Results

With VE testing back on a trial basis, Gene WO2W reports the following results:

Name	Call	License Earned
<b>August 8</b>		
PATRICK AINGE	AD2AZ	Tech/General/Extra
JOHN KALYMNIOS	KD2ULH	Technician
CRISENTE MARASIGAN	KD2UAY	Extra
BRIAN ERICKSON	KD2ULI	General
CHRISTOPHER RIOS	KD2TIE	General
NICHOLAS YATSKO	KD2ULG	Technician
<b>August 22</b>		
KEVIN KOETTERS	KD2QWQ	General
JULIAN LIU	KD2UMV	Technician
CHAN LEE	KD2UMW	Technician
MATTHEW R. DAVIS	KD2UMX	Technician
MICHAEL SAUER	KD2UMY	Technician
GARY SPOHN	KD2UNG	Technician
DUSTIN HELMS	KD2UNH	Technician
GERARD ZANNELLI	KD2UNJ	Technician/General
NICHOLAS VOLK	KD2UNI	Technician

## Four Special Interest Groups [SIGs] Already Formed: Any Others?

We may be in lockdown but there is no lack of club interest. So far, the Radio Monitoring Group has 18 members and we've started a Digital Modes (DMR) group thanks to KD2DRS and NP4H. There is also an FT8 SIG and a Portable Ops SIG.

Other possible groups, from the member survey, include:

- *Radio Propagation*
- *Antennas and how they work*
- *Kit building*
- *Raspberry pi and Arduino and*
- *Ham radio software*

Anyone interested in leading any of these groups... ?  
Please contact Nomar NP4H at [np4h@aol.com](mailto:np4h@aol.com)

## Repairs To Club Antennas

Gene WO2W, Brad KM2C and Nomar NP4H completed the survey after the recent tropical storm and made some minor repairs on the roof in mid August. Here is what they found/repaired:

- 1) Mesh/repeater/Echolink mast had fallen, bent some yagi's and crushed a diamond dual band antenna to the right of it. We straightened out all the elements and added blocks to the base of it to prevent it from falling as easily again. None of the antennas rotated so they should be pointing appropriately.



- 2) The mesh node box with a switch in it doesn't appear to have power via POE supplied and had water in it.





## Repairs To Club Antennas

- 3) A diamond dual band antenna was crushed and the radome was snapped in 2 places. This will need to be replaced. The patch panel cable was removed and a red cap placed over the connector.



- 4) Two other diamond roof antennas (tri band and another dual) were loose. One was fully tightened up and the other is missing the mast clamp hardware. We need to bring up some #6-10 size bolts and nuts to lock it down. It is ok for now, but remedies need to be made before the next big storm.



## Repairs To Club Antennas

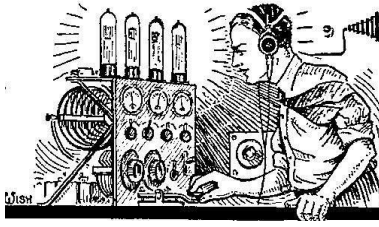
- 5) Tower 2 : A visual inspection from below looks fine, including the dipole wire antenna.
- 6) Tower 1 : The HF antenna rotated about 10° and will need to be rotated back and the clamps tightened down more thoroughly -- the beam didn't drop in height, only rotated. The assumption is that the HF antenna rotated and not the 2M above it. We could be wrong, but they are no longer aligned.



- 7) The Internet connection was restored at the club but an issue with router and facility internet required the router to be reset and manually logged into via telnet to fix the time on it so a VPN connection could be established (TLS errors due to time not lining up). VPN connection was re-established. Basic router settings were restored but if any custom ones for DDNS (Paul/W2IP) were in there they need to be restored.
- 8) KM2C DMR repeater would not connect to the Brandmeister gateway and was worked on for a couple of hours. After being brought home by Brad, it works fine. There is some level of port block on TCP 62031 that I don't understand and will have to work out. We need to meet with the Rec. Center facility people and straighten out our port blockage issues for once.

End of report by Brad, KM2C





*Image from May, 1926 QST, courtesy ARRL*

## The Way We Were

### Some “Memorable Characters”

By: Fred Belghaus W2AAB

History can be one of the most fascinating subjects to study, as well as one of the most important. Without a study of the past, we have no perspective on the present; and no clue about our possible future. But history, as it's usually taught in schools is often quite dull. Part of the problem can be laid to bad teachers, bad textbooks, or biases that obscure meaning.

History isn't supposed to be just a collection of names and dates learned by rote. Neither is it supposed to be ideological propaganda. When a human face is put on history, it becomes not merely interesting, but exciting. It is, after all, a narrative: a story; and a good story will hold our interest as it unfolds.

The word “character” can be applied to many things. If a building's architecture is unusual; not necessarily beautiful or ugly, but if there's something about it that's noteworthy, we'd say it has “character.” The same could be said of the way that a garden is laid out, or the way in which a house is decorated. There's something about it that's compelling. So it is with people, and without people, there would be no history.

Have you ever known a person whose mannerisms, habits, passions or way of life left a lasting impression on you? I'm sure you have. We all have memories of such people. We may think of them favorably, or negatively; as amusing or just plain odd, but it's that “something” about them that makes them stand out among other people we've known.

This month, I'd like to introduce you to some “characters” that I have encountered in amateur radio that had something noteworthy, something compelling about them — for better or worse.

I'll start with a genuine “character.” His name was Myron, but on the air, he used the name Mike. His call was W2OY and he lived in Lancaster, New York. Mike was first licensed in 1919 as 8AHQ, later as 8MU and later still as W8MLR when Upper New York State was in the eighth call area. [1]

Mike was a fixture on 75 meter AM phone in the 1950s and '60s, and I have many memories of him. He was a curmudgeon. He'd get on the air and call CQ, but not in the usual way that people do. He'd call CQ like this: “CQ, CQ, CQ. No lids, no kids, no space cadets. Class A only. No phonetics....” The “Class A” refers to a long discontinued class of license issued from the 1930s until 1951, roughly equivalent to what was once the Advanced Class license.

## The Way We Were

In its day, it was the highest license class available, and distinguished itself by offering full phone privileges on the amateur bands. The questions on the exam were, of course, mainly about AM modulation.



Mike, W2OY  
Image: W2DTC.com

Mike didn't want to talk to beginners in ham radio, as well as what he considered poor operators, regardless of seniority. If a young person would make the mistake of calling him, Mike would read the riot act to him. When I first heard Mike waxing wrath, he had slightly modified his classic CQ to include "No WA's, no WB's, no K-kilowatts. No lids, no kids, no space cadets." He would later add, "No school bus drivers, no school bus riders... No YLs."



## The Way We Were

Here are a few sound clips of Mike in action. Source: Note [2]

<http://w2dtc.com/w2dtc-sound-bites/w2oy-no-lids-no-kids.wav>

<http://w2dtc.com/w2dtc-sound-bites/w2oy-phonetic-school-bus-riders.wav>

<http://w2dtc.com/w2dtc-sound-bites/w2oy-class-a-operators.mp3>

I recall reading an article some years ago in the no longer published *AM Press Exchange*, in which the late Herb Ulrich, K2VH (ex-K2JVM) wrote extensively about Mike, whom he knew personally. Herb described Mike's powerful signal as being due, in part, to the painstaking efforts Mike made to cut his antennas to a specific frequency and insure a perfect match, which he obtained by carefully cut quarter wave stubs for each of them. Mike's 400 Watt World War II surplus BC-610 transmitter certainly helped, though.

Ulrich reported that Mike was actually a different person when not on the air, often extending his help to local kids aspiring to become hams, and also by doing some sort of charitable work for local children.

Mike used to spar with another old timer from Upstate New York, whose name was Donaldson, and whose call was W2HH. I don't recall the specifics of these arguments, except that "HH" would always chide Mike for his operating habits, and that sometimes, these arguments would become quite heated. In response to castigations by "HH," Mike would simply dump his rock crushing signal on top of the other station, and begin CQing again.

Mike used to regularly talk to two other hams in a friendly way. One was Dick, W2UJR, and another station, whose call I have forgotten, whom Mike always referred to as "Pollock Pete." (I have some of that ethnicity in my own ancestry, but I forgive ole Mike. He just didn't know any better).



## The Way We Were



BC-610 Transmitter –  
so big it had to be moved about on wheels!  
Image: Wikipedia

My late uncle John W2VQD had his own story about Mike. He recalled hearing Mike make one of his classic CQs, only to be answered by a YL station from W4-land. When Mike replied with one of his tirades, the Southern Belle responded by calling him “W2-Obnoxious Yankee.”

But Mike wasn’t always a curmudgeon. In Ulrich’s article, he states that during the 1930s, Mike was an active CW message handler, who had been honored for his handling of hundreds of health and welfare messages during a local flood. What changed him? There are several theories about that, but perhaps the most plausible one is that Mike didn’t like the changes that had taken place in amateur radio after World War II.

I think Mike felt that with changes in licensing, especially the elimination of the Class A license, and the creation of the Novice and Technician classes in 1951, something had been lost. The changes had destroyed the honor of being a licensed amateur, especially those who had achieved the Class A license.

By the way, in the 1930s, there were no multiple choice tests. All questions except those involving schematics required answers in essay form. All the schematics in the test had to be drawn by the applicant before the FCC examiner.

One of the questions involved both. The applicant had to draw a schematic of his proposed transmitter, and then explain, in essay form, what the circuit was and how it worked. How many hams, even Extra Class, could do that today?

Of course, they also had to send and receive accurate code at 13 words per minute, too.

From Mike’s perspective, it’s easy to see how he would feel that the changes were an insult to those who had come before and who had proven their competence by much more stringent standards. Mike should only be around today to see what amateur testing has become, and if he listened to the amateur phone bands today, he would probably quit ham radio entirely and take up stamp collecting.

## The Way We Were

I only heard Mike on SSB once, after somebody loaned him a Galaxy SSB transceiver. That was about 1967, just before he died. But he just didn't sound the same. His booming, well-modulated AM signal had been reduced to a tinny sounding squeak, and not at all pleasant to listen to. I sometimes wonder whether Mike's diminished audio and resulting reduced influence on the band became a factor in his early demise. As an eyewitness, Ulrich described that event.

Mike was working on his tower as Herb watched from below. Something happened to annoy Mike, and he flew into a rage, spewing a purple salvo of profanities. Then he turned blue. He was having a fatal heart attack, and died up there, "with a curse on his lips," as Ulrich wrote. He had to be removed from his tower by the Fire Department's Hook and Ladder. He was only in his early 60s. Herb concluded his article by calling Mike "an enigma." Yes, he certainly was that. Sorry I don't have a W2OY QSL to show you. I've never seen one. I don't think anybody has. I never worked Mike, either. In fact, I wouldn't dare even call him back in those days. But when his life is put into perspective, I can't help but think of him as a tragic figure.

=====

Another great "character" on 75 meter phone was Harry, W8RHZ. Like Mike, Harry knew how to put a booming signal on the air. He built a monster wire array for this purpose — four half waves in phase for 80 meters, 70 feet high — which he used on 80 and 40. Harry had been operating AM phone for many years using a pair of Eimac 250 TH finals running 1 kW, with the classic Collins 75A-4 receiver. When I first encountered him, he was running SSB with a Galaxy GT-550 transceiver driving a Henry 2K amplifier at "1 kW" input. His QSL to me confirms our QSO of January 24, 1973 under one of my former calls.

<div>W A S 160, 75 &amp; 20 PHONE</div> 	<div><b>W8RHZ</b> #85,445</div> <div><b>TWINSBURG, OHIO</b></div>
	<div><b>CONFIRMATION OF QSO</b></div> <div>Station <u>WB2CST</u> Date <u>1-24-73</u></div> <div>Your phone report: <u>R5/9+10</u> SSB <u>175</u> Meters</div> <div><b>RECEIVER</b></div> <div>Collins 75A-4</div> <div><b>TRANSMITTERS</b></div> <div>75 Meters AM - pp Eimac 250THs — 1 KW</div> <div>6 Meters AM - Thor 6 Transceiver <u>2K4</u></div> <div>SSB { 75 &amp; 20M HT32B — Henry 2K-Linear</div> <div>{ 75 &amp; 20M HT32B — pp Eimac 304TLs</div> <div><u>FLDR 400</u> <b>ANTENNA</b> <u>GT-550</u></div> <div>4 - 1/2 waves in phase — <u>70</u> ft. high 75 &amp; 40</div> <div>4 Ele. 20 meter Hi-Gain Beam, 70 ft. up</div> <div>one leg of a 64 ft. Spaulding Tower.</div> <div>6 Ele. Telrex Beam, 6 meters, 65 ft. high on</div> <div>a track, also. <u>Inv for the stamps 1174045</u></div> <div><u>Free - Enjoyed the QSO - See you soon W8Harry</u> <b>HARRY L. STEFFAN</b></div>

## The Way We Were

On 20 meters, Harry used a 4 element Hy-Gain TH-4 beam up 70 feet, and on 6 meters he ran a Clegg Labs "Thor 6" driving another kW amplifier to a 6 element Telrex beam up 65 feet.

Harry's QSL card is so big, I've had to divide it in half. The bottom half is below, showing Harry and his wife. Notice the rows of bound notebooks in the shack background. Every one of those many volumes constituted Harry's log. But it was no ordinary log. Every new contact was given a number, starting, presumably from his first contact back sometime in the 1930s. By the time I worked him, he gave me QSO number 85,445. Harry was meticulous about his record keeping, and on each succeeding QSO, he would give you a new number.



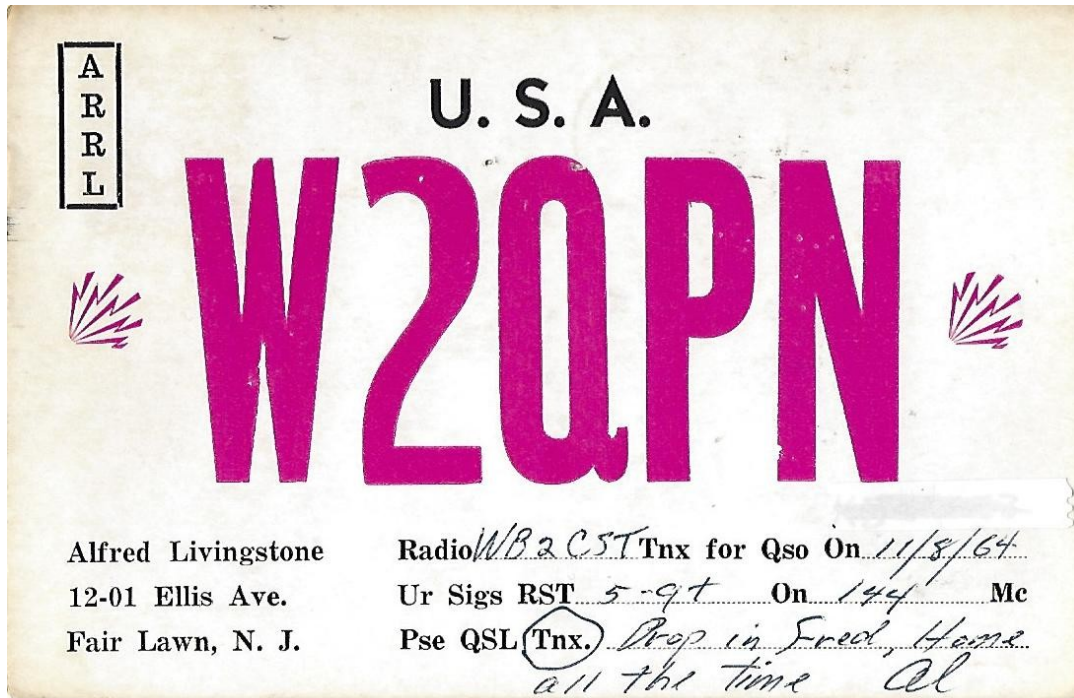
Not only did Harry record the usual log data, such as date, time, frequency, signal report, etc., but practically every detail of what you said to him. When I worked Harry a second time, for instance, he rattled off like this: "OK, Fred, it says you were running a Heathkit HW-12 to a Gonset GSB-201 amplifier with four 811As in the final, and an inverted vee up about 65 feet fed with balanced line to a Johnson KW Matchbox. You mostly work CW, but you like 75 meter SSB, too. I wonder how you're doin' with your traffic nets?" and so on. Harry was amazing!

Harry ran a printing business, and his QSL card was printed by his own company. He printed cards for others too, but they are not common. "His frequency" on 75 was 3955, and he was on it every night without fail. He was always friendly and quite congenial, and the only time he ever got a little "testy" was when some lid would tune up on him or start calling CQ right near his frequency. Well, we'd all get that way under the circumstances. Harry was immortalized in an issue of the vintage amateur radio collector's and builder's magazine *Electric Radio*, which featured Harry and his wife Winnie on the cover. [3] Harry passed away in 1975. Even after all these years, I can still hear his distinctive voice in my mind's recording device. Harry was one of a kind. They don't make 'em like that anymore, and that's a shame.



## The Way We Were

Not all “characters” are from far away. Some were quite local. One was a Fair Lawn ham, whom I remember quite well, and I’m sure many other locals licensed in the 1950s and ‘60s will remember him, too. His name was Al Livingstone, and his call was W2QPN. Al lived on Ellis Avenue, and he was a former Phys. Ed. Teacher at Eastside High School in Paterson.



I worked Al on 2 meter AM in 1964, shortly after I had entered my senior year at Fair Lawn High. I was using a Heathkit “Twoer” borrowed from FLARC. Al also operated on 20 and 75 meter AM. He used the phonetics “Quarters, Pennies, and Nickels.”

Al was known as a seller of surplus radio and electronic equipment of various kinds, but especially World War II military surplus, as well as tubes and other parts. He called his business Livingstone Electronic Laboratory. Under that name, he sent out several lists of his sale items. Here’s one of them, from 1964:



## The Way We Were

(201) 796-8906

LIVINGSTONE ELECTRONIC LABORATORY  
12-01 Ellis Avenue, Fair Lawn, New Jersey

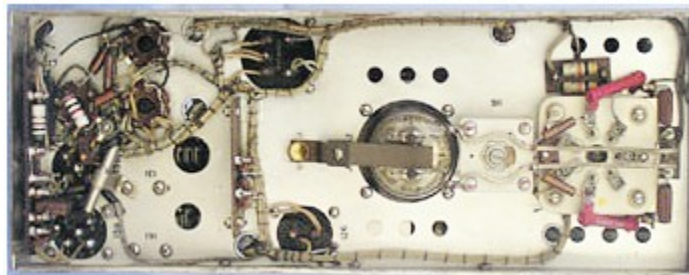
Since 1922

### FOR SALE LIST #43

<u>Army-Navy Surplus, BC, SCR, Etc.</u>	EACH
Antennas, AN75D, AN29C, AN131A, ea. \$5.50. AN130A/B, Ant. for TBY	2.50
Ant. Reels, RL 42A/B, 24vdc, gear train, less Spool, Fair	3.75
Ant. Dummy Loads, PC 76418-C-191, \$1.75. Sperry Gyro Amp. 644838, 4 tube	3.75
BC 367, Amp. & Inter-com, 12vdc, w Dyn, 3 6V6s, exc. cond.	8.75
Bull Horn, SC-TPM-4 Trigger Grip w Amp. Box, 4 Tubes, no bats,	8.75
Inter-com, Navy Master NV-14 T 1A, 10 Stations, 120vac, good cond.	19.75
Capacitors, .012-25K, .01-25K, .1-8K, 2x.1-7K, .2-5K, .1-3K, .05-16K	2.75
Inter-phone Amplifier, AM-26/AIC, 28vdc, 4 tubes, w Mt & Dyn. eq/new	7.75
Chokes, 4/24H-.440 Ma, \$5.50. 8/7.5H-.44A. 8H-.365A, all exc. cond.	4.00
Control Cables, ARC-5, Mc215 & 6693, \$1.75. Antenna AT 5/ARR-1, 12"	1.00
Coils for BC 312/342, 1st & 2nd RF & 1st Det. Stage in Alum boxes	2.50
Final Tank Coils for BC 610, 2-3.5mc & 4.4-5.7mc, exc. cond.	2.50
Coils for BC 430, Comp set of 5, 2.5 to 7.7mc, new	set 5.00
Coil set, Ant & Tank with two crystals for BC 611, Walkie-Talkies	set 5.00
Cables, CD 6693, CX 165/T10-3, 125, ZA 3142, CX 165/T1Q, 10H, others	1.75
Connectors, PL 169, 170, 172, 114, 152, 118, 151, 156, 147, 154, others	.95
Control Boxes, BC 442A, \$4.75. BC 450A, \$2.75. BC 496A, \$1.75, BC 602	2.50
Dynomotors, ARC-5, ARR/2, DM32A, \$1.75. N10K, 9/ARC-1, Ty E, DML3J others	7.50
Head & Hand Sets, R30F, R30FR, H79, B19 Mk2, TMC Sound Powered	4.50
Head & Hand Sets, R-14, T30S, TS13C, TS9F, TS11L, exc. cond. others	3.75
Manuals, TM-11 235 (BC 611) \$3.75. TM-11 242 (BC1000A) others	2.75
Manuals, TM-11 275 (BC654A) \$3.75. TM-11 300 (BC221)	3.75
Manuals, TM-11 866 (BC779) etc. \$3.75. AN 08-10-112 BC 348J/N/Q	5.75
Manuals, TBY Reprint, \$1.75. BC 312/342 \$3.75. CW-3 Fixed Recr.	2.75
Microphones, T44A, \$1.95. T17B \$3.95. MC419 \$1.95. T30R, SC331A	2.50
AAF Compasses, AF B-16, \$12.50. Com. Ind Weston 637, \$9.50. Comp. E6B Nav	4.95
Voice Filters, BA 189, FL -10, F15C/N, F1-8aN, exc. cond.	2.75
Altimeters, Mxxv, MK XIV, XIVA, \$9.50. Radio Compass Ind. I-82A	4.75
Code Training Set, AN/GSC, 120vac, Spkr & Blink, complete	25.00
Electronic Keyers w Pullers McElroy G813A, 120vac, Variable speed, exc.	25.00
Electronic Keyer as above but less puller and plug-in relay	7.50
Set of 15 Tapes for above G-15AA in wood box good cond.	25.00
Electronic Keyer TG-10, Automatic, gray	19.00
Ink Recorder for making tapes, McElroy SR 900/SL990, Comb. Unit	35.00
Recorder/Scanner, BC 918B with roll of tape	25.00
CP5-A/APS15, X-Band R. F. Head, 17 tubes, blower, xtal. exc. cond.	19.50
I. F. Strip, 25/30 mc, 13 tubes, Carry Handle, Exc. cond.	15.00
Wave Trap, F19/UFR for AN/APR-1, to 300mc Condenser type	5.50
Blowers, Airway 2-400, Redmond 1M29158, Oster #133, all 27vdc, exc.	4.75
Motors for Prop-Pitch Rotators, both types, abt 4x6" & 5xt" dirty	5.00
Rotators, Lear with gear train, small, 24vdc, good cond.	7.50
Aircraft Starters, 2 JH4FR & 1 JH5F, good cond.	15.00
Generator, Emerson, 12vdc-100 amps, 5400rpm, 1HP. new	15.00
Mounts, FT 151, 162, 220, 221, 226, 229, 231, 232, 233, 488	2.50
Wet Batteries for TBY, 4v \$2.50. Vib. Pwr Unit TY CLG for TBY	3.50
PE 104/A for BC 654 A, \$7.50. RA-20 P/S for BC 312, \$12.00. PE 237 exc.	19.50
Voltage Regulators, LN Ty 948-7, Eclipse Ty 1067, Gen LN 23508, exc.	2.75
Variacs, Gen. Radio, 200c/cu, V-5, exc. cond.	9.50
Power Supply, Northern Radio 105-4B, 350vdc, Bias, Fils, Reg, New cond.	35.00
Probes, Low Cap, USN, MX50/AP, with PL 259, new cond.	4.75
Receivers, CW-3 120vac, xtal cont. with coil set \$19.00 less coils	15.00
Radio Compass, Bendex, MN 26C, Mod for M115, exc. cond.	19.00
Receivers, BC 728H, 4 band, 2-6mc, portable, less wet battery	17.50
BC 733D, exc. \$9.50. BC 1068A, 150-200mc w rf gain & output added	15.50
BC 1068A, no conversion \$24.00. BC 433F/G/G. 15 tubes, Radio Compass	19.50
BC 342N. exc. cond. \$69.00. RL/ARR-2 all tubes \$0.50 R57/ARR-5	0.50

## The Way We Were

Al was most famous in our area for being the local source for the SCR-522. This equipment was a World War II VHF package, consisting of a BC-624 receiver and a BC-625 transmitter, used by the Army Air Corps. The units were enclosed in a large, black box, and they covered the frequency range 100 to 156 MHz. It was once a popular and inexpensive way for beginning amateurs to get on the 2 meter band. Conversion to 2 meters was relatively simple, and the complete rig (transmitter and receiver) sold generally for about \$25 or less. It could also be converted to 6 or 10 meters. Of course, to put one on the air, you'd also have to build a modulator and appropriate power supplies. None of these requirements were considered obstacles by amateurs in those days.



Inside Views SCR-522/BC-625 transmitter

Image: <https://vk2bv.org/archive/museum/bc625.htm>

The BC-624 receiver was a superheterodyne, and some were used by amateurs. I once had one myself. It had been converted by W2PMV of Bogota, and it included a large, National "AGS" type vernier dial. It worked, but it was far less effective on 2 meters than one of the commercially available VHF converters with an HF ham band receiver as a tunable IF stage. In most cases, only the transmitter was used by amateurs. It had an 832A power amplifier, capable of about 10 Watts output. Many amateurs modified the final stage by replacing the 832A with an 829A or 829B, a push-pull VHF power amplifier tube capable of about 75 Watts output on AM phone, and about 90 Watts output on CW up to 200 MHz. [4] FLARC once had one of these rigs for 2 meters. Another was owned by George Zink, WA2QCK, another FLARC member, who once lived on Berdan Avenue.

One of my High School buddies, Jimmy H., was a FLARC member. He was studying for his Technician license, and decided to buy a "522" and convert it to 2 meters. Jimmy and I visited Al one evening at his famous basement shack and radio emporium. Everywhere, there were shelves of equipment for sale. Most of it was surplus, some homebrewed by Al himself or by local amateurs. There were hundreds, if not thousands of parts for sale also: tubes, meters, variable and fixed capacitors of every kind, coils and coil forms, transformers, chokes, and you-name it. It was Ham Builder's Heaven.



## The Way We Were

And there was Al himself — a diminutive man, about 65 years old at the time, who watched his visitors like a hawk protecting the young in her nest. Al was proud of his home-built kilowatt rig. It was built in a five foot, 19 inch wide rack, which he used on 20 and 75 meter phone. Taped to the rack-mounted transmitter was a QSL card from K7UGA, Senator (and recent Presidential candidate) Barry Goldwater, whom Al had worked on 20 meters.



Al was extremely proud of his contact with Goldwater, and guarded the QSL with his life. In 1964, it was still common to hear AM on the HF amateur bands, but that would change rapidly within another year or so.

There was one other thing about Al's QTH: Burglar alarms. There were several of them, their red metal bells plainly visible on the side of his house, along with signs inside and out that warned any potential thieves, "These premises protected by ADT." Evidently, Al was convinced that he had pure gold in his basement, and he wanted to be sure that no one ever walked off with any of it. His prices, by the way, were a bit high, in my opinion.

Nevertheless, Jimmy bought the "522," and we lugged it back to his home on Eberlin Drive. I built the power supply for it using a full wave diode bridge rectifier circuit. As I did this, Jimmy carefully disassembled the transmitter and receiver from their large box enclosure, and then began the conversion process of the transmitter, the hours passing slowly, interrupted frequently by Jimmy's chain smoking of unfiltered Camels. He worked on that rig for a long time. When we graduated from High School, and I moved on to college, and Jimmy to RCA Institutes, he still hadn't finished it. I don't think he ever did. Jimmy later moved to North Carolina. He never got his amateur license, and passed away in 2009.

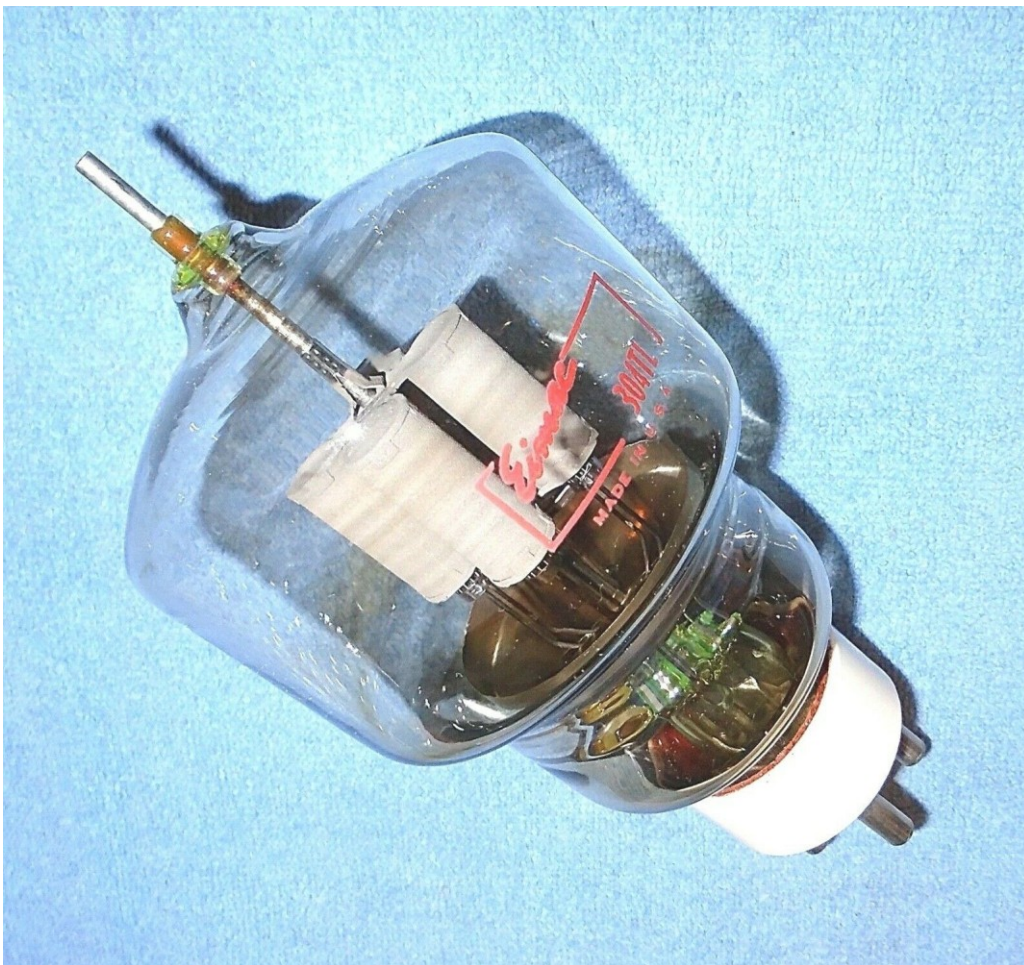


## The Way We Were

In later years, Al changed his call to W2LA, a call he only held for a short time before becoming a Silent Key himself.

Another interesting local was John Grubb, W2FGV. John lived on Midland Avenue in Fair Lawn, but his Callbook listing always gave the town as Warren Point, New Jersey. Evidently, that listing was on his original license, and it stuck all the years he lived here. Warren Point is a locality only, on the Southern end of town, and, like the rest of Fair Lawn, was once part of Saddle River Township.

John was an old school ham. He took pride in his ability to build equipment, including antennas. His tower on Midland Avenue was visible for blocks. I was told by another local that he had built it himself, but I cannot confirm this. It was about 50 feet high, and topped by a homebrew 3-element 20 meter monoband beam. The feedline was atypical. He ran a short length of low loss coax from the beam to the rotator, just long enough to allow full rotation of the antenna in all directions. From that point to the shack, he ran a balun with a length of home-made open-wire, balanced line, for even lower losses to the rig. Originally, John ran a homebrew SSB exciter driving a homebrew linear amplifier using a pair of 304-TL triode power amplifiers for roughly 1 kilowatt input.



Eimac 304-TL transmitting tube  
Image: eBay

## The Way We Were

This tube was quite a “bottle,” and was once quite popular for homebrew high power RF amplifiers. As I write this, the bidding on the one pictured above on eBay is up to about \$90.00. It will no doubt go higher. The 304-TL actually consists of four elements; each one equivalent to an Eimac 75-TL tube, but in one glass envelope. Each 75-TL was capable of 75 Watts up to 300 MHz, and all four inside the 304-TL means the “bottle” was capable of some 300 Watts (actually more). The 304-TL was originally used in World War II RADARs as pulse modulators or as power amplifiers in other equipment. [5]

John used a Collins 75A-2 receiver, with a “Sideband Slicer,” made by Central Electronics. The “Slicer” was an accessory used in the earlier days of SSB consisting chiefly of a phase-shifting network that provided selectable sidebands, reducing the unwanted sideband by some 40 dB. [6]



Collins 75A-2 Receiver  
Image: Universal Radio

John was one of the earliest of amateurs to embrace SSB. In those days, it was still being called “SSSC” (Single Sideband Suppressed Carrier). His call appears on a list of SSB stations on 75 meters dated February 1, 1953. [7] There are only eight stations listed from Bergen County. The only other Fair Lawn station listed is that of Harold “Inky” Ingraham, W2MMN, who once lived on Lyons Avenue.

Later, John used a Central Electronics SSB exciter, the correct model number of which I do not recall. I believe it was a 20A. John was interested in working DX only, and he was very active on the 20 meter band. I’d hear his rock-crushing signal almost every evening somewhere around 14210. He would call “CQ DX, CQ DX, from W2 Frank George Victor...W2 Frank George Victor, New Jersey calling DX 20 and standing by.” A small pileup would ensue, which he worked one by one, and then called CQ DX again. Whenever he transmitted, a rather loud blower could be heard in the background — no doubt cooling the big 304-TL “bottles” in his amplifier.



## The Way We Were

He was an excellent operator, and although I only heard him on CW once, I'll never forget the time he called CQ DX on 20 meter SSB and was answered by a UQ2 station in what was then Soviet Latvia. The UQ2 called him on CW, at a speed of at least 25 WPM. To my amazement, John came right back. He had copied the call correctly, and proceeded to carry on a lengthy QSO cross-mode for some time. What a guy!

By the time I worked him, he was running a Galaxy V (Roman 5) transceiver, but he no longer had QSL cards, so I made up one for him, which he graciously signed and returned to me.



I never met John, but wish I had. A friend of mine and fellow FLARC member was Glenn WB2JGD, who once lived on Berdan Avenue near Fair Lawn High School. Glenn was, at the time, dating John's daughter, and after visiting the FGV shack, told me something about John and his operation.

In the summer, Glenn said, John would sit at his desk in a pair of Bermuda shorts and, smoking a huge cigar, he would work DX -- frequently downing refreshment from a chilled bottle of Pepsi.

Glenn said John owned a "Sweet Shop" in Paterson at the time, but I have never been able to confirm that. Glenn, like all DXers, was impressed by the many exotic DX QSL cards that decorated the walls of John's shack.

After hearing Glenn's description, I drew a sketch back then of what I imagined John's shack to look like, including his big homebrew linear, the famous 304-TL final, and his wall of DX cards.

## The Way We Were



John is shown working one of his regular DX contacts, Shlomo at 4X4AS in Israel. Such DX was commonplace for John's mighty signal.

Now and then, John would be chastised by a certain Saddle Brook station for allegedly causing splatter to this other station's "private" frequency of 14205. I could write an entire column about that Saddle Brook station, but suffice to say that unlike his all Collins S-Line station and "big amplifier" (hidden behind a wall), FGV at least built his own equipment, could copy high speed code, sent out QSLs, and never had any issues with the F.C.C.

When John became a Silent Key, his son Bob obtained his call. You can read a tribute to his dad here:

<http://hamgallery.com/Tribute/W2FGV/>

In 1957, John was in the running for the annual Edison Award, bestowed upon amateurs who had made a significant contribution to the hobby, especially for public service. Although he didn't win the big award that year, he received a Public Service Commendation for his part in message handling. [8] He also "Elmered" local kids, and acted as Volunteer Examiner for their Novice exams. [9]

The call W2FGV has subsequently been re-issued as a vanity call to an amateur in Arizona. [9] I don't know what connection, if any, there may be to the original FGV.

Now, we move on to a truly unique "character." He was Irwin ("Irb") Richardt, W2VJZ, of Liberty Corner, New Jersey. Where is that, you ask? Liberty Corner is an unincorporated locality within Bernards Township, in Somerset County. The place was originally called Annin's Corner, after its largest landowner, John Annin, who established himself there in 1722. The name was changed to Liberty Corner during the American Revolutionary War. [11]

The spirit of American Liberty, indeed the American Revolutionary spirit itself, continued to live a robust life in Liberty Corner, due in no small part to the efforts of W2VJZ. "Irb," which was his name on the air, could be heard mainly on 75 meter AM phone, usually on or near 3885. He never operated SSB or CW. He was strictly an AM guy, who remained active daily on that mode until his death in 2006.

## The Way We Were

"Irb" was a Patriot in the classic, historical sense. He was not a "flag waver," or member of a militia. He loved our country like no other human being I have ever known, and he believed in the U.S. Constitution as its Holy Writ. He was passionate about free speech (within the limits of decency), justice for all, both high and low, and above all, human liberty. He named his dog Ethan, after Ethan Allen.

Although some people have used the First Amendment to abuse others, violate common decency, or provoke violence, that was not "Irb's" way. He had strong views about government, local and national, and he expressed those views any time he thought government at any level violated the powers enumerated in the Constitution. Sometimes, his views aroused heated responses from other amateurs, but "Irb" never lost his temper or used abusive language. He kept his cool and responded to each objection in a firm but respectful manner, but never yielded his position. Nevertheless, he had many enemies, who wished to silence him just because his opinions differed from their own.

Some of these amateurs complained to the FCC about him, which resulted in a "warning" issued by then FCC Enforcement Agent Riley Hollingsworth, charging him with allegedly "monopolizing" the frequency, and not allowing other amateurs to use it. His response to Hollingsworth stated that he had been the victim of frequent jamming, and that he had been subjected to "filthy lies and language" from another station. Hollingsworth threatened "enforcement" action against "Irb" if the alleged activities continued, but no further actions were taken against him. [12]

"Irb's" method of calling CQ was unique, often with references to the U.S. Constitution, Thomas Jefferson, and Jesus Christ. Here's a typical example: *"Calling CQ, CQ, CQ, CQ America, CQ the spirit of Jesus and Jefferson. W2VJZed... W2Victor John Zebra calling CQ, CQ America. Obey the Constitution or be cited for treason!"*

He lived on what was called the "Sons of Liberty Farm," a simple, Colonial era wood frame house on 22 acres, upgraded many years later by his blind father, W2GZJ. For a detailed history of the original structure and its upgrade, as well as more information about "Irb" and his many crusades, see Note [13].



"Sons of Liberty Farm"

Image: <https://www.stanglpottery.org/SonsOfLibertyFarm.htm>



## The Way We Were

Although the property on which he lived was worth millions, “Irb” subsisted on a small income derived chiefly from selling bottles of maple syrup raised on his farm. Local elementary schools made field trips to his farm, during which “Irb” would explain to the children how the maple syrup was harvested. I don’t think he believed in banks, from the way he attacked bankers as “banksters.” He opposed taxation, permit and license fees as “theft.” He also didn’t recognize the right of states to pass laws mandating insurance coverage on motor vehicles, referring, as he did, to the insurance industry as the “insurance mafia.”

He proved his convictions by abandoning, on his property, an old school bus that he once drove, once the state passed such legislation. Instead, “Irb” either walked or rode a bicycle. His bicycle was equipped with a battery operated 10 meter rig in the basket, and a 10 meter whip antenna on the rear bumper. He often bicycled to New Jersey hamfests, such as those sponsored by the Tri-County Radio Association in the Plainfield area, and the one held in Sussex County.

“Irb” decorated his property with various signs asserting his convictions. Here’s one of them:



“Irb’s” station contained multiple Heathkit DX-100 transmitters, and Hallicrafters S-20R “Sky Champion” receivers. I lost count of how many he owned, but there were at least four or five DX-100s, and as many S-20Rs in his shack. The S-20R was first sold in 1939, but “Irb” carefully re-aligned and tweaked each one for maximum performance. He had solid copy on stations using his 75 meter S-20R that I couldn’t even hear on my Collins 51S-1!

His 75 meter antenna was a simple dipole, strung on tall trees and running over a pond. He also had a waterproof speaker outdoors on a pole; and sometimes he would call CQ, his audio accompanied by the sound of wind chimes; and if no reply was received, gave one final call, adding: “Listening on the outside speaker.”

## The Way We Were

Here's "Irb" at one of his many DX100s with one of his many S-20R receivers:



Image: YouTube

For full video, go to: <https://www.youtube.com/watch?v=fheMPTWjMjs>

No account of W2VJZ would be complete without some sound files, so here are some.  
Source: see Note [14]:

<http://w2dtc.com/w2dtc-sound-bites/2005-0707-w2vjz-broadcasting-cq.mp3>

<http://w2dtc.com/w2dtc-sound-bites/2003-0320-w2vjz-execute-for-treason.mp3>

<http://w2dtc.com/w2dtc-sound-bites/2003-0311-w2vjz-singing.mp3>

<http://w2dtc.com/w2dtc-sound-bites/2004-1021-w2vjz-little-bell-big-bell.mp3>

In this clip, "Irb" describes life with his father:

<http://w2dtc.com/w2dtc-sound-bites/2004-1207-irbs-father.mp3>

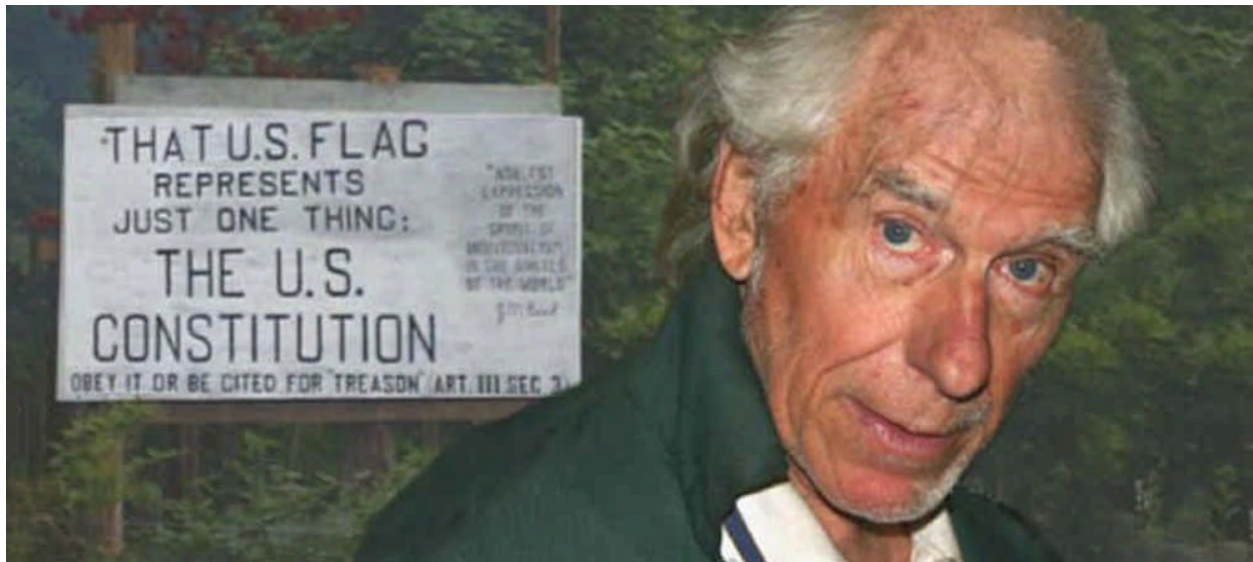
## The Way We Were

I worked “Irb” several times on 75 meter AM, and it was always an interesting, if unusual experience. I met him several times at his Sons of Liberty Farm, accompanied by my longtime friend Pete, W2PM. I once gave “Irb” a ten meter coaxial antenna, but I don’t know whether he ever used it.

“Irb” also had a second QTH at a farmhouse in New Russia, New York, in the Adirondacks. When operating from there (with even more DX-100s and S-20Rs, he concluded his transmissions with “...in NEW Russia, in the EMPIRE state!” This was a dig at one of his other pet peeves, imperialism, along with militarism and usury. I wondered how he got up there, since he no longer drove. Well, he rode his bicycle up there, sleeping along the way in cemeteries.

I think “Irb’s” displeasure with banks was because they practiced usury on loans, and his dislike of militarism was because one of his brothers, Robert, was killed in 1944 during World War II. I don’t know for sure, but I’ll wager that his brother was a draftee. He had another brother, John (“Hammie”) W2WIY, who was quite a different person.

“Irb” idolized Thomas Jefferson. He not only read all of Jefferson’s writings (in several volumes), but could recite whole paragraphs from them. He even resembled Jefferson, with his ponytail at the back of his head. Someone once referred to “Irb” as “an eighteenth Century man living in the twenty first Century.” I think that’s the most accurate description of who he really was. And that’s why he was so misunderstood.



“Irb,” W2VJZ in Colonial Era costume.

Image: w2dtc.com

On one of my visits to his farm, I gave him a copy of Alexis de Tocqueville’s famous work, *Democracy in America*. “Irb” balked, and reminded me that we don’t live in a democracy, regardless of what we’ve been taught in “the corporate schools” and what has been repeated by politicians and talking heads in “the corporate media.” “We live in a Republic!” he explained. “Our Founders did not want a democracy. They called that ‘rule by the mob.’” He directed me to read Article 4, Section 4 of the U.S. Constitution. I did, when I got home, and he was right. I have never made that mistake again. Don’t believe it? See note. [15]


## The Way We Were

To my knowledge, there never was a W2VJZ QSL card. I once planned on designing one for him, which would include his favorite slogans, such as "Obey the Constitution or be cited for treason," among others; but I never got around to it.

But here's a rarity. A QSL from John, WA2UOO, (now W2GD), while operating a 2-man portable on 6 meters during the 1971 Field Day, near "Irb's" QTH.

BASKING RIDGE, N.J. 07920  
436 MT. AIRY ROAD

Radio WB2CST Confirming 2-way  
QSO at 0312Z — S.T. G.M.T.  
On 6-27 1971 RST 59  
Your 50 Mc. AM CW 2xSSB RTTY  
Xmtr: HA 460 ? hampth 30 Wts inp.  
Rcvr: same Ant: 10 mtr dipole  
PSE QSL, INX Direct Bureau  
73 JOHN M. CROVELLI

MORRIS RADIO CLUB  
  
SOMERSET CTY  
AREC-AEC RCC  
ORS WAS CP-25

WA2UOO  
W9SKR  
W2VJZ Irb op-12

The antenna used for 6 meters, by the way, was a 10 meter rotatable dipole installed on a 105 foot water tower. The operator I worked was "Irb," W2VJZ!

An issue of *Weird N.J.* several years ago contained an article about him, as well as a letter from a reader about "Irb," suggesting that he was some kind of "gun nut super-patriot" type. Nothing could be further from the truth. "Irb" detested violence in all forms, and he believed in the sanctity of life as part of his religious faith; a faith he practiced regularly at the Fellowship Deaconry in Basking Ridge.

"Irb" wasn't a "perfect" human being, but neither are any of us. Yes, he had some prejudices, too. But he wasn't afraid to express all his ideas, no matter how unpopular, to anyone who would listen.

If you disagreed with something he said, he would refer to a remark attributed to Jefferson: "I may not agree with what you say, but I will defend to the death your right to say it."



## The Way We Were

"Irb" passed away three days before Christmas, in 2006. There have been several obituaries written about him, some quite nasty; but one in particular is the most accurate, complete, and fair-minded that I have found, and I recommend it. [16] After his death, an auction of his radio equipment was held at his former home, at which many DX-100's and S-20R's were sold to collectors.

Despite all the often cruel and preposterous things said about him, on the day that I learned of his passing, I mourned. He was a unique individual who had old fashioned ideas about what we **say** are our American values, but there are very few men with courage enough to put them into practice. With "Irb," such words as "liberty" and "justice" were not mere abstractions. They were concrete realities that were meant to be held to, regardless of consequences. It's a pity that there are not more men of such courage in today's world.

Until next month,

73,  
Fred W2AAB

— • • • —

### NOTES:

[1] Ballantine, Robert, W8SU, "Myron H. Premus – W2OY – 8AHQ – 8MU – W8MLR – W2PQI – W2PWK \* 1903-1967\*," *Old QSL Cards*, at: <http://www.oldqslcards.com/W2OY.pdf>

[2] W2DTC: "Amateur Radio Sound Bites," at: <http://w2dtc.com/w2dtc-sound-bites-page.htm>

[3] Cover photograph, *Electric Radio* magazine, January, 1990

[4] "829B Twin Beam Power Tube," *RCA Transmitting Tube Manual*, at:

<https://www.datasheetarchive.com/pdf/download.php?id=295a78fd31f37860ca17e2388f3cc38bee4bea&type=O&term=rca%2520tube%2520829b>

[5] "304-TL," at: <http://n6jv.com/museum/304t.html>

[6] Central Electronics Datasheet, at: <http://www.ce-multiphase.com/img/slicers-brochure.pdf>

[7] "Roster of Active SSSC – 75 Meter Phone Stations," Compiled by W2BHN, W3ASW, W9DYV, and W3KPP, at: <http://ce-multiphase.com/1953-ssb.pdf>

[8] *G-E Ham News*, March-April, 1958, p.8, at:

[http://n4trb.com/AmateurRadio/GE\\_HamNews/issues/GE%20Ham%20News%20Vol%2013%20No%202.pdf](http://n4trb.com/AmateurRadio/GE_HamNews/issues/GE%20Ham%20News%20Vol%2013%20No%202.pdf)

[9] *The Record*, December 6, 1966. (No text accessible except by subscription to newspapers.com). Reference can be found by Google search "W2FGV" and at: <https://www.newspapers.com/newspage/491372519/>

[10] Callsign lookup: W2FGV, *F.C.C. Universal Licensing System*, at:

<https://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=786583>

[11] *Wikipedia* article: "Liberty Corner, New Jersey," at: [https://en.wikipedia.org/wiki/Liberty\\_Corner,\\_New\\_Jersey](https://en.wikipedia.org/wiki/Liberty_Corner,_New_Jersey)

[12] *The A.R.R.L. Letter*, Vol. 23, No. 46, November 19, 2004, at: <http://www.arrl.org/arrlletter?issue=2004-11-19> (A.R.R.L. Member log-in required)

[13] "Sons of Liberty Farm, Liberty Corner, New Jersey," at: <https://www.stanglpottery.org/SonsOfLibertyFarm.htm>

[14] Note [2] Ibid.

[15] U.S. Constitution, Article IV, Section 4: "*The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against invasion; and on Application of the Legislature, or of the Executive (when the Legislature cannot be convened) against domestic violence.*"

Source: "The Constitution of the United States: A Transcription," at: <https://www.archives.gov/founding-docs/constitution-transcript>

[16] (No byline), "End of an Era in Liberty Corner," *New Jersey Hills Media Group*, December 28, 2006, at:

[https://www.newjerseyhills.com/end-of-an-era-in-liberty-corner/article\\_689d97ea-4315-5b91-964d-af52690722bf.html](https://www.newjerseyhills.com/end-of-an-era-in-liberty-corner/article_689d97ea-4315-5b91-964d-af52690722bf.html)



## **DMR (Digital Mobile Radio) Special Interest Group**

The DMR SIG has had a lot of activity this past month. As of this writing we have 20 members. Many are new to DMR and have been helped by the others with DMR experience to get up and running.

Members of the group have been using TalkGroup 310015 for now. We will use the traffic data from this TalkGroup to show the DMR administrator that we have enough interest to get a dedicated FLARC DMR TalkGroup. 310015 is only available via HotSpot right now.

We will be having FLARC DMR Nets on the 310015 TalkGroup until FLARC gets their own TalkGroup. By vote the FLARC DMR Net will be Tuesday Evenings at 9:00pm, after the NorthStar Digital Net. The NorthStar Digital Net is on STEM TalkGroup 31630.

The NorthStar Digital Net (NSDN) is on Tuesday Evenings starting at 8:00pm and is a great resource about digital voice radio technologies. Note that the NSDN has many check-ins and many great discussions about digital radio and other STEM related topics. The NSDN has gone past 9:00pm may times. The FLARC DMR Net will start after the NSDN is completed. It is suggested to check TalkGroup 31630 if you do not hear the FLARC DMR Net going on. To get onto either of these nets a HotSpot is required.

About HotSpots -- many in the FLARC DMR SIG have built their own HotSpot using a Raspberry Pi Zero W and MMDVM board using Pi-Star software for under \$100.00. Join the DMR SIG group for information on how to build one.

Those interested, join in on all the DMR excitement!

Contact Bob H. [KD2BKD@optonline.net](mailto:KD2BKD@optonline.net) for information on joining.

Or just go to the club website **FairLawnARC.org** and use the "Join Special Interest Group(s)" link on left.

DE Bob KD2BKD

## **Radio Monitoring (SWL) Special Interest Group**

To date, the Monitoring SIG has 23 members that participated in a short survey to measure interests and get the group up and running.

Without giving away the data (you have to be a SIG member for that!) there were some very interesting findings:

- AM, police, aircraft/nautical, and shortwave are the primary listening interests of the group
- About two in three are willing to make an active contribution to the group
- Nearly two out of three group members spend about an hour a day monitoring other than ham radio
- Most of the group got started in the hobby as kids—mostly during the period of 1960-1980
- About two thirds of the group already belong to a shortwave or monitoring club or group
- The primary expectation of the group is to learn – more about radio, the spectrum, and from each other
- There is equal interest in chasing DX as in program content?
- About four in ten are interested in Dxpeditions
- About six in ten are interested in vintage equipment
- About eight in ten are interested in old airchecks

That's it for starters. Dave N2AAM is putting together a members-only speakers program and we're looking to extend our outreach to those who listen to radio as a hobby and are looking for / or never knew that there was a group of afficianados like this around.

And the more members the merrier.

Contact Ed at [wx2r@arrl.net](mailto:wx2r@arrl.net) for more information on joining.

Or just go to the club website **FairLawnARC.org** and use the "Join Special Interest Group(s)" link on left.

DE Ed WX2R

## Radioddity GD77 DMR Dual Band HT Radio with “OpenGD77” firmware

By Robert Holstrom – KD2BKD

First, it is pronounced “radi – oddity” and this article is specifically about the Radioddity GD77 with “OpenGD77” firmware.

The custom “OpenGD77” firmware was written by amateur radio operators for amateur radio operators. It makes the radio more “ham” friendly in that it has many of the features that amateur radio operators are used to. Typical DMR radios, and even the stock Radioddity GD77, are used in the commercial market -- which is different from the way amateur radio operators are used to using their radios.

The improvements over the stock firmware include:

- front panel programming (DMR TalkGroup, TimeSlot, ColorCode),
- added power levels (50mw, 250mw, 500mw, 750mw, 1w, 2w, 3w, 4w, 5w),
- expanded receive range,
- enhanced display,
- menu item for separate DMR + FM mic level adjustment,
- CC/TS/TG filter control,
- Inverted color display,
- Brightness/Contrast display control,
- hotspot mode,
- and much more.

It is not difficult to flash the custom “OpenGD77” firmware into the radio. It does void all warranties if you do so. All the information is available on the DMR SIG (<https://fairlawnarc.groups.io/g/DMR>)

Thanks to Dave N2AAM and Jim W2JC for their detailed documentation of the procedure to load “OpenGD77” firmware. A “Codeplug” of the local repeaters is also available for the “OpenGD77” radio. Note that the available codeplug only works with the radio if you have the “OpenGD77” firmware installed.

Now about the actual radio. Everything comes with it that you need. For under \$100.00 you get the 5-watt dual band, 2m/440, radio which will do DMR and analog. Battery, charger, 2 antennas, belt clip, and programming cable are also included.

The regular stock instruction manual is also included which, once the “OpenGD77” firmware is installed, is useless – as it is virtually a new “ham” radio now!



Continued on next page.

## Radioddity GD77 DMR Dual Band HT Radio with “OpenGD77” firmware

First thing to do when the radio arrives is to charge the battery fully. Battery needs to be fully charged before updating of firmware. This is the first thing I did before updating the firmware. Because of this I do not know how the radio worked out of the box. All I did was to check that the battery was full. For full documentation of how to update the radio to “OpenGD77” firmware, the firmware and instruction manual for operating the radio with “OpenGD77” firmware are in the FILES area of the DMR SIG.

The radio hardware of the GD77 is very good. The audio output is 1 watt which is enough volume. The case has a solid feel with a weight of 9 oz with battery and antenna. The battery has lasted all day for me and just a nightly charge was required. The display is ok with enough information displayed. It is not color but it is readable with and without the backlight on.

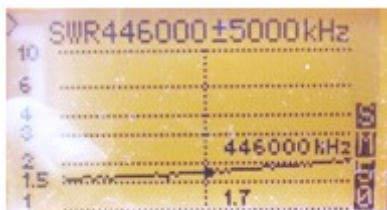
I was surprised to get 2 antennas. I am used to purchasing 3<sup>rd</sup> party antennas for my HTs to get a bit better coverage. I tested both antennas that came with the radio. The SWRs were as follows:



Shorter Antenna UHF



Shorter Antenna VHF



Longer Antenna UHF

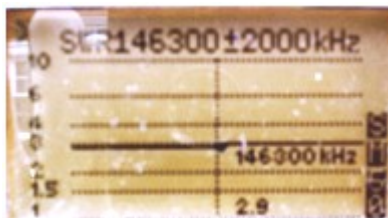


Longer Antenna VHF

Not that bad for stock antennas but not as good as a Diamond RH77CA that is an additional \$25.00.



Diamond RH77CA UHF



Diamond RH77CA VHF

I have been using the “OpenGD77” radio for a few weeks. For the price, if you are looking for a beginner DMR HT, it cannot be beat for under \$100.00. Three years ago, I bought a TYT MD-380 440MHz only DMR radio for the same price; but with the GD77 I do not need to carry around a second radio for 2 meters.

One feature I like is that it can become a higher power (1 watt) DMR-only HotSpot. You will need a second DMR radio to use with it. With just a Raspberry Pi Zero W, for under \$10.00, and Pi-Star software – you plug in the programming cable to the USB of the Pi. You set the radio to 1 watt or less and set HotSpot mode to on.

## **It Can't be Done**

I read a clever trope the other day about dark emitting diodes. They are similar to light emitting diodes (LEDs) except they emit dark – or suck light depending on your viewpoint. The article says you can make one by hooking up an LED backwards. I've hooked LEDs up backwards and can confirm no light comes out – not even a little; it really is dark! I also know if you push too much forward current through an LED it will stop emitting light and go back to making dark. It's been postulated that dark moves faster than the speed of light – since it was dark before the light got there.

Dark emitting diodes may not be available yet, but some things that were stated to be impossible years ago are now commonplace. We take these “impossible” things for granted. These are things the experts, professors, deep-thinkers and aficionados not only said could not work, or exist – they went to blackboards and wrote the equations to prove it. Lots of learned papers and PhD theses have been written “proving” the limits of what's possible - only to be disproved later. Do you have to give back your PhD degree when some kid comes up from the basement with a working model of a machine that does what you “proved” was impossible?

A running gag where I worked: “Sure it works in practice, but does it work in theory?”

Here are two of my favorite “it can't work” ideas – one directly related to Amateur Radio.

### **1. *Long range communication***

Back in Marconi's day, spanning the Atlantic with RF seemed nearly impossible. Marconi claimed to do it in 1901 and by 1903 was doing it regularly, but there were problems. He could only do it at night. It took giant antennas and huge amounts of power. Marconi was working with “long waves” — frequencies below today's AM broadcast band. The experts of the day were positive it was not possible to pile on enough power into unimaginably big antennas to get very far during daylight. Also, everybody knew that the higher you went in frequency the shorter the distance the waves traveled. You could run your own experiments and prove it. Long wave signals seemed to follow the curvature of the earth to some degree – they certainly made it over the next hilltop – somehow. Higher frequencies appeared to only work line-of-sight. RF communication in 1905 was simply a brute-force activity. More power, more antenna, lower and lower frequency gave more distance – that was it.

By 1912 the QRM between hams, commercial stations and the navies of the world was so fierce below 1 MHz that regulations were imposed. Ham radio was nearly killed outright at that point – who needed a bunch of amateurs making QRM when shipping companies and the navies needed the airwaves? Remember, many lives were saved in April, 1912 when Marconi Company operators aboard the Titanic sent out an SOS (actually, in those days it was CQD: CQ-Distress). A compromise was reached allowing ham radio to continue, but the hams were relegated to the useless wavelengths of 200 meters and down (1.5 MHz and up). Ham interest fell for a few years following 1912 – who wanted to have their range so badly limited?

## **Around the Shack**

Meanwhile, a self-taught engineer and mathematician named Oliver Heaviside theorized, in 1902, that a layer of charge might exist well above the earth's surface. Heaviside was ridiculed and his preposterous idea ignored by the scientific establishment. That is until hams discovered the practical use of the ionosphere in 1923. Nobody laughed at Heaviside after that.

Hams got the last laugh. The useless frequencies above 1.5 MHz they were "stuck with" turned out to be the most useful frequencies of all. Long distance RF communication in daylight – thought impossible – became commonplace. The experts were wrong.

The book *200 Meters and Down*, by Clinton DeSoto, was first published in 1936 and is still published today by the ARRL. It is a must-read for every ham. It's easy to read and exciting. It tells the story of how ham radio almost came to be outlawed and the efforts to keep it legal. You can buy it from the ARRL for \$15.95.

### **2. LEDs.**

LEDs are items that, every step of the way, were not thought practical and in some versions not possible. A feel for how far-fetched the idea of a diode that would emit photons was is how long it took anyone to make one. The first LED-like device was actually demonstrated in 1927 – when semiconductors were not understood. In the early 1960s, as transistors started to replace vacuum tubes, semiconductors began to be understood from a theoretical physics standpoint and the thought of light emitting semiconductors was born.

Unlike RF communication, where the experimenters were ahead of the physicists, LEDs came about with physics first and process engineering to following – with both communities proclaiming many times that they had gone about as far as they could go.

The first LEDs emitted miniscule amounts of light in the infrared. It took lots of current to get very little light – in the invisible part of the spectrum. So much current, that the diodes had to be pulsed – they would burn up if continuous current was applied. Eventually improvements in efficiency permitted a reasonable amount of light output at lower current and continuous operation was achieved. After the infrared diode came the Red LED.

It should be noted at this point that LEDs were and are something of a witches' brew of nasty elements and compounds. Early devices were made from Gallium-Arsenide (read: Arsenic). But there was lots of experimentation with Gallium Antimony, Indium Phosphide (read: Phosphorous), Silicon-Germanium and others. One-off lab curiosities had process engineers perplexed as to how such compounds could be produced safely, with high purity, at low cost and in some cases at high temperatures and pressures. It just didn't seem possible.

While Red LEDs were being sorted out, the Green LED was invented and seemed literally impossible to build in quantity. There are now many different formulas for Green LEDs but all require more elements and/or compounds, that are tougher to create and control, compared to Red LEDs. It's a testament to process engineers that ways were found to build these parts for pennies each.



## Around the Shack

The penultimate LED turned out to be the Blue one. Physicist were emphatic that the tuning of LEDs from the infrared to red, to green, to yellow, were incremental improvements, but the basic physics simply would not stretch all the way to blue. A Blue LED was a highly desired item too – it was the last primary color. The light from a Red, a Green and a Blue LED could be mixed to produce any color, including White. The blue LED became the holy grail of electro-optics.

I've droned on long enough about LEDs. Blue LEDs came about and they did require a different physics approach than the others – but the impossible happened. Then the ultimate LED came about: White. Then impossible-to-ever-achieve efficiency was achieved and now we can buy White LED light bulbs for \$1.

The history of LEDs is covered well on WIKI – it's a good read.

As LEDs were developed, a companion technology emerged in the form of laser diodes. At first these were described as an invention looking for an application. Applications were quickly found however. Red laser diodes became the basis for barcode scanners. Infrared laser diodes, thought of as nothing more than a historical stepping stone, became the part of choice for remote controls. Data storage density was greatly increased by the short wavelength of blue light from blue laser diodes, making things like the Blu-Ray DVD possible.

So, what are you working on that can't possibly work?

A Hint: It doesn't take a lab full of equipment or a degree in physics to invent a new antenna.

73,  
Hal N4GG

Chance of Transmission	Asymptomatic COVID-19 Carrier	Uninfected Person
VERY HIGH		
HIGH		
MEDIUM		
LOW		
VERY LOW		
VIRTUALLY NONE		

## N2ECH Member Profile, continued

**What should be the club's priorities in the next year?**

From what I can see in the short time of being a member, the Club has covered and addressed everything that they could given the circumstances that we are currently dealing with. Offering virtual attendance to the meetings and learning sessions is such a positive experience and offering the continual ability to those that may not be able to attend any other way even in the future would be great. From Field Day, Testing Days, Kawfee Tawks, etc., the club is truly second to none and I hope to be a member for a very long time.

**What other ham related clubs or organizations do you belong to?**

FLARC is the one and only. There is no need to look anywhere else!



Gregg N2ECH



## W2MSA Leads Lively August Kawfee Tawk For Parks on the Air

With a Zoom group of 39 in attendance, Noel W2MSA – in collaboration with Matt N3NWV and Harold KC2BPP – presented this exciting opportunity to get deeper into operating on August 21<sup>st</sup>.

POTA is designed for portable amateur radio operations that promote emergency awareness and communications from national and state/province level parks.

With over 15,000 hams involved from 22 countries, POTA has taken off in the last few years. Matt raised some interesting points that POTA is much like Field Day in set up and operation but more approachable from a public relations standpoint. It also offers many chances to mentor new hams, collect awards, learn to operate in all weather and improve operating skills.

You can be either an activator or a hunter and requires no special equipment. Activations vary in length of time.

A lively discussion was also a part of the evening and you can learn more at [www.parksontheair.com](http://www.parksontheair.com).

**Noel has set up a POTA FLARC SIG, which sounds pretty exciting.**

**Contact him directly by phone or email.  
See page 47.**



POTA logo

## Vintage Radio Quiz – Answers

By: Fred Belghaus W2AAB

Collecting and restoring vintage amateur radio equipment has become a major interest area in our hobby. Last month, I offered you the challenge of identifying the manufacturers of some of this equipment. Old timers may have found this too easy, but maybe not. Here are the answers to last month's article. **Score 5 points** for each correct answer. Here we go....

### Model number or name

HA-2  
HC-2  
HQ-170  
HX-1  
HXL-1  
SP-600  
Manufacturer **Hammarlund**

FPM-300  
HT-37  
S-85  
SR-42/-46  
SX-101A  
Manufacturer **Hallicrafters**

AGS  
FB-7  
HRO  
NC-183D  
NCL-1  
NCX-3/-5  
Manufacturer **National Radio Co.**

32S-1/-2/-3  
32V/32V-1/-2/-3  
75A/75A-1/-2/-3/-4  
75S-1/-2/-3  
KWM-2/-380  
Manufacturer **Collins Radio**

R-9  
T-9  
TBS-50  
Manufacturer **Harvey-Wells**

GT-550  
III (Roman numeral)  
V (Roman numeral)  
Manufacturer **Galaxy Electronics**

### Model number or name

"Adventurer"  
"Challenger"  
"Invader"  
"Navigator"  
"Pacemaker"  
"Ranger"  
"Thunderbolt"  
"Valiant"  
Manufacturer **E.F. Johnson**

10A  
20A  
100V  
200V  
"Slicer"  
Manufacturer **Central Electronics**

2B  
L4-  
R4-/-R7/-R8  
T4-  
TR-3/-4/-6/-7  
Manufacturer **R.L. Drake**

720  
722  
723  
753  
Manufacturer **Eico (Electronic Instrument Co.)**

"Commander"  
"Communicator"  
G-28/-50/-76  
GC-105  
GSB-100/-200/-201  
"Sidewinder"  
Manufacturer **Gonset**

## Vintage Radio Quiz – Answers

### Model number or name

DX-100  
GR-91  
HR-10  
HW-101  
HX-1  
SB-301  
Manufacturer **Heathkit (Heath Co.)**

“Explor-Air”  
HA-410/-460/-650  
HE-10/-30/-45/-50/-90  
KT-200/-320  
Actual manufacturer **Trio (Kenwood), sold by Lafayette Radio**

CX-7  
CX-11  
Manufacturer **Signal One**

“Apollo”  
“Interceptor”  
“Saturn”  
“Thor”  
“Venus”  
“Zeus”  
Manufacturer  
**Clegg Laboratories (once located in Mt. Tabor, among other places in N.J.)**

### SCORING:

90 -100% - You’re a real old timer. Take your meds and then take a nap.  
80 – 90% - You’re getting there. In a few years, you’ll be an old timer, too.  
70 – 80% - You’re not doing badly, but work on it.  
60 – 70% - Not bad for a 30-something.  
50 – 60% - You still have a way to go before retirement.  
40 – 50% - You’ve got a long way to go before retirement.  
30 – 40% - Are you still a Novice class?  
20 – 30% - You must be a Tech.  
10 – 20% - Have you ever been on the air, even once?  
0 – 10% - Don’t kid me, you’re only an SWL.

Well, that’s it. Now you know where you stand in your knowledge of Vintage Amateur equipment. Don’t feel bad if you scored low. Twenty years from now, you can write your own quiz about equipment made in the 1980s and after. But it won’t matter to me. I won’t be around.

73, Fred W2AAB

### Model number or name

R-599  
R-1000/-2000/-5000  
T-599  
Manufacturer **Kenwood**  
FL-50/-100  
FR-50/-101  
FRG-7  
FTDX-400  
Manufacturer **Yaesu**  
  
6N2  
PC2  
PC6  
Manufacturer **Polytronics Laboratories (“Polycomm”) once located on Getty Ave. in Clifton, also West Caldwell**

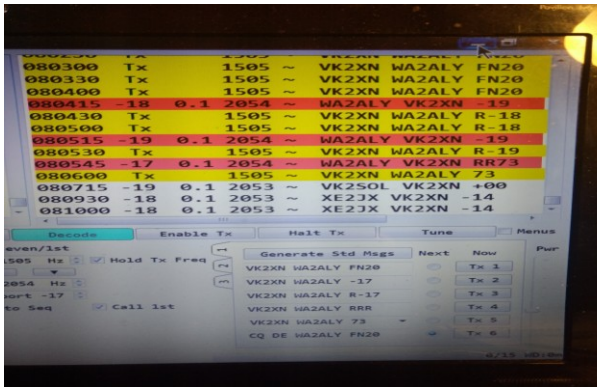
“Champion”  
“Chief”  
“King”  
“Scout”  
“Trotter”  
Manufacturer/Dealer **World Radio Laboratories (“W.R.L.”) The word “Globe” preceded each of those model names.**

240  
250  
350  
500  
Manufacturer **Swan**



## How Do You Work Australia On 80 Meters?

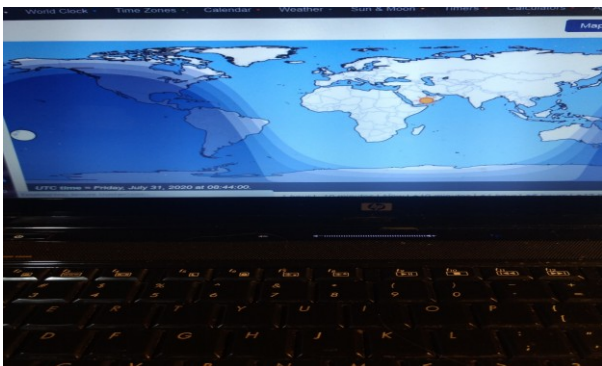
Captain Larry WA2ALY shows us how to make a 9,883 mile QSO using FT8 on August 1<sup>st</sup>. Working VK2XN on 80 meters with 100 watts a 130 foot long inverted L and 120 radials, each 25 feet long. It was at 7 minutes into MY astronomical twilight, and 41 minutes after his sunrise.



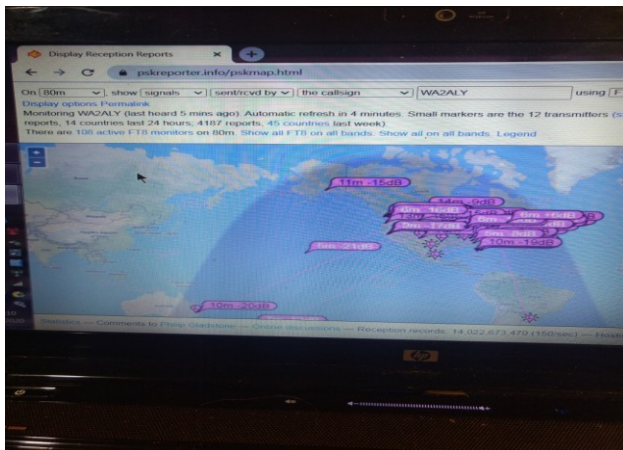
Time	From	To	Frequency	Mode	Power	Notes
080300	Tx	1505	~	VK2XN WA2ALY FN20		
080330	Tx	1505	~	VK2XN WA2ALY FN20		
080400	Tx	1505	~	VK2XN WA2ALY FN20		
080415	-18	0.1	2054	~	WA2ALY VK2XN -19	
080430	Tx	1505	~	VK2XN WA2ALY R-18		
080500	Tx	1505	~	VK2XN WA2ALY R-18		
080515	-19	0.1	2054	~	WA2ALY VK2XN -19	
080530	Tx	1505	~	VK2XN WA2ALY R-19		
080545	-17	0.1	2054	~	WA2ALY VK2XN RR73	
080600	Tx	1505	~	VK2XN WA2ALY 73		
080715	-19	0.1	2053	~	VK250L VK2XN +00	
080930	-18	0.1	2053	~	XE2JX VK2XN -14	
081000	-18	0.1	2053	~	XE2JX VK2XN -14	

The QSO

How many radials? ;)



The Grayline



WA2ALY spots

## FLARC's Participation in NJ QSO Party in Jeopardy

The certificates on the clubhouse wall tell the story of our strong participation in this annual event - scheduled this year for Saturday, September 19th.

We have done this as an annual club event, using W2NPT, and it has drawn many members participating in a casual, no pressure experience of contesting.

With the clubhouse closed, it may be time for Plan B - or just to have members participate on their own for the glory of FLARC.

The rules are here:

[http://www.k2td-bcrc.org/njqp/njqp\\_rules.html](http://www.k2td-bcrc.org/njqp/njqp_rules.html)

We need someone to step up...  
let's get real or let's not play.



NJ QSO Party Devil

## In A Nutshell

What a summer and what a year! No one wants to get sick in any way. Wear a mask for your protection and that of others. Do not wear while driving if alone or with family or close friends, breathing your own carbon dioxide can cause you to pass out and get into an accident which could be and has been deadly.

Get outside in the air and sun. Sunlight kills viruses within seconds. Open your house and let fresh air in! All this being said, things have been slow hamwise but not dead. I have been on various nets and even started one on 3.925 on Tuesdays at 9:50 or so lots of fun! So get on the air and talk to others band conditions permitting. Looking forward to getting back to normal, so get on the air in the meantime.

Frederick Wawra, W2ABE, 73.

## Noel W2MSA Looks To FLARC Members To Create New POTA SIG

Noel has followed up to say that after his Kawfee Tawk presentation on POTA, he has received a lot of positive feedback and interest for this aspect of the hobby.

He has started a Portable Op SIG for FLARC, which will include POTA/SOTA/IOTA/LOTA etc.

He is encouraging us to share experiences, stories, tips and photos. He was also was thinking of maybe planning a POTA multi-park activation for FLARC. The plan is: depending on how many participants, we could pair up two cars per park, one CW/Digital operator and one phone operator so that we can cover both end of the bands. Social distancing will definitely be in effect.

If you'd like, he can arrange a zoom meeting and talk about it more in detail.

Please contact him at:

noelw2msa@gmail.com

...so he can start a list of people that are interested.

Noel W2MSA



## ARRL SNJ Convention and Hamfest

While many hamfests have been cancelled, the Gloucester County Hamfest is still on schedule for Sunday, September 13<sup>th</sup>. You may check the club website

<http://www.W2MMD.org>

to make certain the event is not cancelled at a later date. This location (NJ Turnpike Exit 2) is a two- hour drive from Bergen County but some may be sufficiently interested that they will make the trip.

*If you go, be careful. Wear a mask. Stay two meters apart. Wash your hands and/or use disinfectant. No one with any health restrictions or personal concerns should participate.*

## Fair Lawn RACES/ARES Corner, cont.

Please sign up for various nets and activities taking place, at the following email address:

<https://arrrl.volunteerhub.com/lp/nnj>

Info on FL-RACES is as follows:

Our next FL-RACES KB2FLR net will take place on Wednesday, September 9th at 2015 hours on the Fair Lawn ARC Repeater as well as the NJ2BS Repeater (frequencies noted above). Thank you to the Fair Lawn Amateur Radio Club for permitting FL-RACES for using the repeater.

FL-RACES is part of several RACES groups which operate within Bergen County and from time to time has training opportunities with Bergen County RACES. We will be the Net Control Operating Station for the BC-RACES Net once again in November. Further details will follow.

During the COVID-19 pandemic, our monthly briefings take place during the FLARC business meeting. Please join us for the next FL-RACES briefing. The volunteer efforts of our members are very much appreciated.

If you are interested in joining the Fair Lawn RACES, please contact me. Anyone who's a licensed amateur radio operator may join Fair Lawn RACES and there's no residential requirement.

For information regarding Bergen County RACES, please go to <http://www.bcnjraces.org>.

Please be safe and well. Thank you very much. 73.

David KD2MOB



## ***Fox Hunting Takes Place in Fair Lawn***

By Nomar Vizcarrondo, NP4H

**Fair Lawn, NJ** – On Saturday, August 22<sup>nd</sup>, 2020 the **Fair Lawn Amateur Radio Club**, after months of not joining face to face due to the world-wide COVID-19 pandemic, reunited at the clubhouse parking lot, practicing social distancing, to launch a Fox Hunt in the Borough of Fair Lawn.



John L. Howard, W2JLH and Karl B. Frank, W2KBF organized the event – and to make it safe and maintain social distancing, this fox hunt came with a twist. Participants were to remain in their vehicles while searching for the “fox.” Shortly before leaving, we received the visit of Ron, KC2TBD who came to say hi to the participants and offer his support to the event. At 11:55am, W2KBF - being the “fox” for the event - left the parking lot at the Community Center and placed himself at the ending location for the hunt, which would be at the Forrest Elementary School, located at 10-00 Hopper Avenue. John W2JLH left with me, to act as a decoy for the hunt.

At 12:00 noon, the hunters left the Community Center looking for the “fox.” The first one to arrive at Forrest Elementary School was **Steve W12W** - finding the location only 8 minutes after the start of the hunt. Shortly after, **Bob KD2BKD** joined at the finish point and coming in number three was **Jim W2JC**. Others that joined in the hunt were (in order of arrival to the school): **Francesca KD2UJW**; **Brian KD2KLN**; **Steve WA2BYX** & **Tom N2AXX**.

*“It was a very nice event, allowed us to get together - which we hadn’t done since March”* said **John L. Howard, W2JLH**, one of the organizers of the Fox Hunt and Vice President of FLARC. He added: *“I’m very happy with the turnout and it was really a fun event”*.

Continued on next page.



**“Remember, this fox does not have a tail”**



**The Fox – W2KBF**



**Is this the fox’s lair?**



**Bob KD2BKD**



## ***Fox Hunting Takes Place in Fair Lawn, continued***

Karl W2KBF, the “Fox” for this hunt, expressed that it was lots of fun. *“After 30 minutes, we still had people looking for the fox. It was hard for some to find. The first one to find it did it only in 8 minutes.”* Karl continued: *“This fox hunt not only allowed the experts to show their expertise, but also allowed others to learn.”*

We went and spoke with some of the participants of the fox hunt to get their impressions on this event and what they used to locate the fox. Steve W12W, who came in first, said that he used an HT with a metal body, a paper towel roll covered in aluminum foil and tuned the radio 10 KHz off frequency, that was his secret for his success. But added that he believes that it was also 90% luck. Bob KD2BKD told us that his method was using a Moxon Antenna with his HT along with an attenuator. He still had to do some *“searching around”*, landed momentarily at the Senior Center, which then led him to the school on Hopper Avenue. We later spoke with Jim W2JC, who used a “tape measure” antenna that W2JLH lent him. He went to the gas station near the club, which is a higher point, tuned his radio off frequency, momentarily got lost on Fair Lawn Avenue, but later arrived at the finish area. He ended saying it was *“beginners luck.”*

Dave KD2MOD also enjoyed the fox hunt and used his Baofeng handheld, tuned off frequency, drove for a bit, but was able to find the fox. Brian KD2KLN said that for him it was *“dumb luck.”* He didn’t know the town very well so went to places he knows, ended up at the Senior Center, shortly after that he “got the scent” of the fox and joined in at the school with the rest. Francesca KD2UJW, who had just become a ham only days ago, joined in the hunt as her first Ham Radio event. She did get some assistance, but was able to find the fox with her HT. She had lots of fun but happily said *“I’ll be doing this again for sure.”*

So, this “mobile” edition of the August 2020 FLARC Fox Hunt was a great success. I am sure that very soon we will have another one of these fox hunts. Also, we are looking to do a Portable Day at Memorial Park. Safety for all is important, so we are looking for ways to do it following all current protocols of social distancing. Stay tuned for the details.

To all again, many thanks for participating and for your support. I will take a line a dear friend of mine says, but make it work for what we are doing here at FLARC:

***“The Fair Lawn Amateur Radio Club does not stop during these trying times,  
we just learn to adapt. We all continue our journey together.”***



**L to R: KD2UJW, KD2MOB, KD2KLN**



**N2AAX**



**Our winner: W12W**

Fox: Karl W2KBF, Decoy: John W2JLH, Decoy: Nomar NP4H, Observer: Ron KC2TBD,  
Hunters found the Fox in the following order:  
Steve W12W, Bob KD2BKD, Jim W2JC, Francesca KD2UJW, Brian KD2KLN  
David KD2MOB, Steve WA2BYX, Tom N2AXX



## New Winlink RMS Gateway (VARA FM and Packet)

Aly ALØY would like to announce the new Winlink RMS Gateway that has become operational.

An RMS station, such as ALØY-3, is a **Radio Message Server**. The RMS is a direct radio port/gateway to the CMS (Common Message Server), which is hosted by the Amazon Cloud (yes, that Amazon).

Winlink originally was used by recreational sailors, since they travelled out of cellphone and wifi range of shore. It has since been widely adopted by Government agencies and EMCOMM personnel because it allows a user who is experiencing Internet failure to continue communicating to the outside world.

Up until about 3 years ago, Winlink maintained multiple dedicated servers of its own, spread around the globe, literally on 5 or 6 continents. These servers mirrored each other, creating a highly robust system linked by both RF and Internet. But as of about 3 years ago, Winlink has relied upon Amazon servers since these have proven to be quite robust. The RF links remain, of course.

Winlink is a program that allows amateur radio operators to send and receive emails and exchange messages with other hams, or regular users with emails, via amateur radio. This feature can be very helpful during internet and/or power outage. It can also be used to send forms like Radiograms, and ICS-213 among others. This application is really helpful during emergencies.

With that in mind, I would like to announce that I have put together (with the help of W2TTT, N2JLF, and W2KBF) a Winlink RMS Gateway that users can connect to in order to send and receive their messages.

The callsign for the gateway is: **ALØY-3** << This is what you connect to.

To connect to the gateway you can use one of two methods:

- *Using Packet Radio:*

- using a TNC (either hardware, or a soundmodem like UZ7HO's sound modem and signalink) @ 1200 Baud
- Direct on 145.050 MHz
- Or via W2LI-2 digipeater

- *Using VARA FM:*

- Download VARA FM and use with a sound interface like Signalink.  
Set to 1200 Baud or VARA FM narrow
- Direct on 146.610 MHz
- Or using NJ2PC/R on 146.610 MHz, Negative shift, PL: 141.3
- Make sure to listen before transmitting, and don't forget to ID after the closing the session.

For those who can use both Packet and VARA, it seems that VARA FM is much faster than Packet.

Aly is also running a BBS system on ALØY-4, which can be reached using the same methods above. Just connect to "ALØY-4" instead of "ALØY-3" Feel free to connect at anytime as both systems are operating 24/7. But, like anything, use it wisely please. If anyone has any questions or comments about this, or would like some help setting up Winlink, please don't hesitate to email me.

73, Aly Badawy      ALØY      aly@al0y.com

## Theoretics Demystified

It is September and time to get back to school! The dog (and cat) days of summer are over, and it is time to get back to basics.

Electricity, we cannot easily live without it but what is it? It is loose electrons jumping from one outer electron orbit to another in a conductor such as copper, which has outer electron orbits around the atom such as to let the electrons jump from one atom to the next. For this to happen there has to be a pressure that we call voltage and this pressure pushes the electrons along the conducting path. When the amount of push is greater, this is interpreted as a higher voltage. As in most scientific discoveries the unit of measure is named after the discoverer!

Next, we have amperage which is the number of electrons measured as passing a given point in a specific amount of time. Note however that you cannot have amperage, the number of electrons flowing, without the push which is delineated as voltage! When you take the measured amperage and multiply it's value by the measured voltage, you get watts. The electric company measures usage in kilowatt hours as watts alone is too small a measure to deal with.

That leads us to control of electricity. Conductors as the name implies, have atoms which the electrons in the outer shell can more easily jump to the next adjacent electron in the presence of voltage (the push again) or more properly electromotive force. Insulators, on the other hand, are materials where the electrons cannot jump between atoms thereby no current can flow. Without these two types of material our electronic world could not exist. Switches are merely devices where the conductor elements can be separated by mechanical action. Relays carry this one step further by having the actuating contacts controlled by a magnetically activated assembly. How? There is a coil of wire through which a voltage and current is supplied, and that causes a magnetic field to be generated and this operates a magnetically sensitive mechanical assembly.

Aha! You say, what is this? Electricity can be 'created' by chemical action, photovoltaic (solar) cells and most importantly by passing a wire through a magnetic field. The magnetic part works both ways, passing a conductor (it has to be moving) through a magnetic field will cause a resultant current to flow in the wire and conversely applying a voltage to a conductor will produce a corresponding magnetic field.

## Theoretics Demystified, cont'd.

This is how a generator works (the first instance) and how a relay works (the second instance). This also how a transformer works. The primary input is energized by a changing/alternating current and this creates a changing magnetic 'flux' which in turn induces a corresponding alternating current in the secondary winding. Changing the ratio of turns between the primary input and the secondary output determines if the resulting voltage is more or less than the input voltage.

Transformers are used for power, audio and radio circuits. I jumped ahead about transformers but anyway. The next basic is circuits. For current electricity to work there must be a circuit or loop. Typically, a source of current electricity (as opposed to static electricity) a battery or another source, a load such as a good old incandescent bulb and conductors (wires) to connect them. The path is from the source, say a battery, through a conductor to the load, a bulb and back to the source which has out and in.

There can also be a way to interrupt the current flow and that would be a type of switch. The source has a plus and minus. In the old days it was thought that current, the electrons flowed from plus to minus, but actually is the other way around. As far as electronics engineering goes that is necessary, but for all practical purposes, the older convention works just fine.

A basic circuit is series meaning one component after another. The next type is a parallel circuit where you take a basic series circuit and add devices next to and wired just as if they were in the series circuit alone. That is where parallel comes in.

If you have a series circuit with many bulbs wired one after another and one burns out the whole circuit becomes inoperative since no current can flow.

With the parallel circuit, if one bulb burns out, the rest stay lit! Remember this just the basics. One other way to control electricity is with resistors, as the name says, they impede the flow of current. How by giving up the lost energy as heat! One of the older and still used ways for control of electricity is using the good old vacuum tube!

The newest way is using solid state devices such as diodes, transistors, and silicon-controlled rectifiers. There are also solid-state relays.

More to come next time.

Frederick Wawra, W2ABE, 73.

## **FLARC Council Meeting Minutes 7 August 2020**

President Nomar NP4H called the meeting to order at 7:30 p.m. on a video conference.

The group recited the Pledge of Allegiance.

President Nomar NP4H called the roll of officers and trustees and all were present except the Secretary, Randy, WU2S and Treasurer Al, WA2OWL. The meeting had a quorum to conduct club business.

President Nomar NP4H announced that the minutes from the July meeting were sent to all members of record and published in the club's newsletter, The Resonator, which is on the club's website at <http://newsletters.FairLawnARC.org>. He asked the members present if there were any corrections or amendments needed. There were none so Dave, N2AAM moved to accept the minutes as published and Don K2PD seconded the motion. The motion passed by acclamation.

Treasurer Al WA2OWL spoke with the President prior to the meeting and expressed that no changes took place. President Nomar NP4H read this month's Treasurer's Report. Don, K2PD moved to accept the report as presented and Gene, WO2W seconded the motion. The motion passed by acclamation.

During the evening we had the visit of Javier Crespi, K2PZB to our virtual meeting. He will be joining FLARC shortly.

Although the Tech Committee had no report this month. Gene, WO2W passed by the building and noticed that some antennas were affected because of TS Isaías and the heavy winds in our area. The Mesh Network antenna was bent at about a 45-degree angle. That was the only thing he noticed from the floor. He took pictures which were sent to the Board. He is willing to setup a work party to have this corrected. Building access is limited, so we need to schedule beforehand to gain access to the facilities.

Ed WX2R reported for the Publicity Committee basically all our events in the rec center and senior center have been cancelled through Columbus Day and probably for the remainder of 2020. "We will

## **Council Meeting Minutes, cont'd**

continue to attempt publishing The Resonator on a regular schedule. On our two public events, AC2ZU's Kawfee Tawk and Dave N2AAM's SIG presentation, we had over 50 attendees for both events. We continue to try different means of outreach, and we got a new member out of these presentations. Looking for new members for the Publicity Committee. Please reach out and let us know.

Bob, KD2BKD indicated that the DMR SIG group had a meeting which went well. It was a show and tell on hotspots. This meeting had a couple of members make their own hotspots. Hopefully, we will have another Friday evening meeting and gain more interest. There were over 40 people on this meeting.

Thom, W2NZ spoke about our You Tube Channel which currently has 466 subscribers, with a gain of nine during the past 28 days. Views are down by 33%, and watch time is down. Charlie's presentation had nice views; Dave's release was today. Hope everyone is enjoying the content. He believes the channel is doing well. Thanks all for the support.

Dave, KD2MOB thanks all for attending the ARES Net at 8pm. There has been greater attendance and appreciates those that are showing up and from other groups as well. Preparation on Winlink is ongoing, which will be a great process. Thanks Jim, N2JLF for running the net last night. Dave is still without power at his home. Again, thanks those that are supporting ARES and RACES.

VP John W2JLH spoke about Field Day and based on Fred W2AAB's calculations, we did better with this new format compared to our regular in terms of points. There are still two members that have not submitted their logs, please send them even as checklogs. Thanks to all that participated.

Judith KC2LTM makes a motion to accept the committee reports. Properly seconded by Skip KD2BRV. The motion passed by acclamation.

In old business, Gene WO2W informed that Memorial Park is open. Our Rec Center is closed to the public. Access is limited if we need to go in. The Senior Center remains closed. The parking lot at the rec center is being worked on and close to 30 new

## **FLARC Council Meeting Minutes 7 August 2020, continued**

spaces will be available. All events at the rec center have been cancelled until January 2021. There will be a VE session tomorrow at a commuter parking lot provided by the town. There will be 12 candidates on both sessions. If bad weather shows up, we will need to cancel the session.

President Nomar NP4H speaks about Kawfee Tawks, and indicated that Noel, W2MSA will present on August 21st his Kawfee Tawk on POTA, Parks on the Air. It will start promptly at 7:30PM. John, W2JLH indicated that for September he will do a presentation on the search for Amelia Earhart and how radios did not help in her rescue.

President Nomar NP4H touches on the Special Interest Groups and mentions these have been moving along, and hopefully getting the FT8 SIG up and running soon.

In new business, VP John, W2JLH mentions that the code classes because of the pandemic and other issues, the code classes that we were offering with Fred, W2AAB and George W3EH fell by the wayside. Because of his schedule, he found another way to learn code. He enrolled in an online course offered by the Long Island CW Club. He is on his third week and has been very good. If anyone wants information, please talk to him and he will give you details. Jim, N2JLF commented that we have great CW operators and we should duplicate that effort at FLARC.

President Nomar NP4H spoke about an idea presented by Karl, W2KBF to do a fox hunt, practicing all measures of social distancing at the park. VP John, W2JLH added that he also spoke with Karl and the fox hunt can be done like BARA, which they do it from the cars. And at a location once you find the fox you are waved in by the fox and we would not be limited to the park. It can make it more mobile and challenging. VP John, W2JLH will head this committee and let us know shortly the developments. Ed asks how available the park could be, do we have limitations? Gene added to this subject and explains the current limitations but agrees that the idea of doing it in the car would be great.

Steve. KA2YRA reminds the members that this

## **Council Meeting Minutes, cont'd**

weekend there will be a virtual hamfest going on. It will be very interesting with exhibitors and presenters. It will be Saturday and Sunday. Ria, N2RJ will be one of the speakers. He placed the link for the expo on the Zoom chat area for those interested.

On Health and Welfare, Van, W2DLT spoke to Norm Hartz, ex-K2IJD and he is at Valley Hospital, suffered a fall and hurt his back. He is accepting calls. He is undergoing a series of tests and may have a blocked artery. He will be moving to a senior center. Also, Carol Van Savage KD2NMV<sup>1</sup> is still at the Christian Home in Wykoff. Needs to find out why the radio lent her is not charging. So, hopefully someone can pass by and find out what is going on. Nomar added that Noel, W2MSA went and swapped the radio. Apparently, there were issues with the charger. Dave, W2AAM added that he heard Carol on the W2AKR repeater from her current location. He added that Noel, W2MSA left her another HT.

Judith, KC2LTM sent a card on behalf of FLARC to Randy, WU2S's wife. She was in the hospital for a while.

Fred, W2ABE mentioned that he belongs to the New England Vintage Electronics Club and they had Tom Perera W1TP<sup>1</sup> give a talk on spy radios. It may be a good idea to reach out to him and see if he can do a presentation for FLARC via Zoom. President Nomar, NP4H asked Fred to follow up on that and see if he can arrange a possible presentation with Dr. Perera<sup>1</sup> for us at FLARC.

President Nomar, NP4H asked our guest Javier, K2PZB if he liked the meeting, which he did, and to talk to the members a bit about himself before closing the meeting.

Having no further business, President Nomar NP4H asked for a motion to adjourn. Ed, WX2R so moved and John, W2JLH seconded the motion. The members present voted in favor and the meeting was adjourned at 8:30 p.m.

Respectfully submitted,  
Nomar, NP4H, President  
(Secretary Pro Tem)

<sup>1</sup> Corrections made at September Council meeting.



## **FLARC Council Meeting Minutes 4 September 2020**

FLARC Council Meeting Minutes 4 September 2020

President Nomar NP4H called the meeting to order at 7:31 p.m. on a video conference.

The group recited the Pledge of Allegiance.

Secretary Randy WU2S called the roll of officers and trustees and all were present. The meeting had a quorum to conduct club business.

Secretary Randy WU2S summarized the minutes from the August meeting and which were attached to the meeting invitation. He asked the members present if there were any corrections or amendments needed. Karl W2KBF mentioned that he submitted two corrections. Secretary Randy WU2S responded that he received them and that the corrected minutes would include Karl's comments. Don K2PD moved to accept the minutes as published and Judith KC2LTM seconded the motion. The motion passed by acclamation.

Treasurer Al WA2OWL read this month's Treasurer's Report.

Randy WU2S reported for the Tech Committee. He said that Brad KM2C, Gene WO2W and Nomar NP4H inspected the antennas on the roof. One of the masts holding the mesh network nodes and a VHF antenna tipped over during the recent tropical storm. The 2-meter Yagi antenna rotated a little on its mast but was undamaged. Nomar suggested that we may want to place several more cinder blocks on the non-penetrating roof mounts. Randy related how his monthly test run of his generator guaranteed that he had a power source when the tropical storm damaged his electric power wires. He recommended that every ham with a generator or with batteries for portable operations check their power sources monthly to ensure their faultless operation when they are needed most.

Vice President John W2JLH passed along a suggestion from Jim W2JC that we renew the antenna cable labels (color codes) and better identify the use and destination of each antenna and cable. Randy WU2S

## **Council Meeting Minutes, cont'd**

said that we will do that when we can access the Community Center again. We will also need to post a cable routing chart since not every antenna cable we have feeds the antenna patch panel.

President Nomar NP4H said that Brad KM2C took his DMR repeater home to maintain it. He discussed the need for Internet connectivity and noted that Karl W2KBF offered an Internet connection via his mesh network access to the club.

Ed WX2R reported for the Publicity Committee that there are no events and that the Resonator continues its monthly publication schedule. Ed thanks all the contributors to the Resonator for their original content. He noted that membership is up to 162. Ed said that he used Eventbrite to publicize FLARC activities to non-hams and received an inquiry from a person in Hackensack. That gave Ed an opportunity to promote our special interest groups (SIGs).

Jim W2JC reported that the FLARC web site has a calendar function that is kept up-to-date and which emails automatic reminders. On the Groups.io website there are four subgroups. They are special interest groups (SIGs) for DMR, Monitoring/SWL, portable operations and FT8. You can subscribe to any or all these subgroups by selecting "Join Special Interest Group(s)" in the menu bar on the left side of the website (FairLawnARC.org). Subscribing to our groups.io is the best way to keep informed of all club info.

Jim reminded members that FLARC has been so active lately that it is a challenge to keep everything up to date. The groups.io calendar is probably the most up to date info we have. The Calendar page on the main website has info about DXpeditions for the month. The License Exams page has current info about our VE testing sessions. The Twitter feed (also upper left of main website page) has brief news items. The Blog has For Sale / Wanted / Interesting articles. The Groups.io has email discussions and shared information. The Groups.io SIG areas have discussions as well as reference files and information. Latest roster is available to all groups.io members, in the FILES area.

Continued on next page.

## FLARC Council Meeting Minutes 4 September 2020, continued

We now have separate SIG [Special Interest Group] areas for FOUR areas of interest:

- DMR
- FT8
- Monitoring/SWL
- Portable Ops [POTA]

It is a challenge to keep the mailing lists for the club updated. The most effective way to keep up to date is to join the Groups.io. At present, we have 127 signed up for the main groups.io. Attention to club emails is rather disappointing. Emails with important announcements are sent using MailChimp, which can tally 'opens' and 'clicks' by recipients. We are averaging about 35% to 45% of the 197 emails are even OPENED to be read. This means more than half the 197 are not even opening FLARC emails, let alone reading the information contained in them. Clicking of links in our 'official' emails is even more miserable. Generally, less than ten people click a link for further information.

Thom W2NZ reported on our YouTube channel. We have 8 new subscribers. Views are up 20 per cent in the last month and watch time is up 6 per cent.

David KD2MOB reported on ARES and RACES activities. He said that Karl W2KBF, Aly ALØY, Jim N2JLF and Gordon W2TTT have set up Winlink capability in our area. Aly is hosting an Winlink RMS (Radio Message Server) node ALØY-3, running mode VARA FM, on 146.610 MHz (in Wayne). Since VARA FM works thru analog repeaters, you can reach ALØY-3 via NJ2PC/R in West Paterson, 146.610 MHz, -600 kHz offset, PL 141.3. ALØY-3 also is available via packet on 145.010 MHz; You can use the digipeater W2LI-2 on Long Island to reach ALØY-3. President Nomar NP4H asked Aly ALØY to do a "Kawfee Tawk" on the Winlink setup and how to use it. Aly agreed to do a talk in October.

Vice President John W2JLH reported on this year's Field Day score. We missed submitted scores for two participants but if our calculations are correct, we had a higher score than last year.

## Council Meeting Minutes, cont'd

Gene WO2W reported on volunteer examiner (VE) sessions. There were two exam sessions in August. There was a 95 per cent pass rate. The next outdoor exam session will be on September 12. The session in October will likely be the last exam session this year unless we can find a suitable indoor location.

President Nomar NP4H asked for a motion to accept the committee reports. Brian KD2KLN so moved and Skip KD2BRV seconded the motion. The motion passed by acclamation.

President Nomar NP4H asked Don K2PD to report for the Nominating Committee. Don said that the recommend slate of candidates for 2021 is:

President –	Nomar NP4H
Vice President –	John W2JLH
Treasurer –	Bruce NJ2BK
Secretary –	Judith KC2LTM
Trustee –	Van W2DLT

Per our revised constitution, nominations for any of the open positions may be made from the members at the October and November meetings. Voting will take place during the December business meeting.

Vice President John W2JLH will conduct a "Kawfee Tawk" on September 18 about the relationship of radio and the disappearance of Amelia Earhart. John also said that the recent fox hunt hosted by Karl W2KBF went very well. John suggested a similar event to be held at Garrett Mountain. John plans to make arrangements.

President Nomar NP4H reminded members about the special interest groups (SIGs) within FLARC for DMR, FT8, Monitoring/SWL and portable operations. Bob KD2BKD said that there is a weekly DMR net on Talk Group 310015 on Tuesday evenings at 9:00 pm or a little later just after another DMR net.

President Nomar NP4H raised the issue of holding our annual auction. Since the Fair Lawn buildings are not going to be open this year, he asked about alternatives. The members present discussed the matter with no firm conclusion. Steve KA2YRA will

Continued on next page.

## FLARC Council Meeting Minutes 4 September 2020, continued

monitor the virtual hamfest/auctions held by other New Jersey radio clubs to help us determine if that model would work for us.

Van W2DLT reported that Carol KD2NMV has a new charger for her HT and will try to join the FLARC nets. Van also said that he and a group of FLARC members helped move Norm ex-K2IJD to his new home in Allendale.

David KD2MOB reported that our daily Health and Welfare net has run continuously for 175 days. He thanked all who participate in the net.

Having no further business, President Nomar NP4H asked for a motion to adjourn. Brian KD2KLN so moved and Steve KA2YRA seconded the motion. The members present voted in favor and the meeting was adjourned at 8:53 p.m.

Secretary Randy WU2S reports that 33 members participated in this video conference business meeting.

Respectfully submitted,

Randy WU2S,  
Secretary

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### What is "the Grey Line" ?

It is the line on a map showing the edge between day and night. The Grey Line is very important for DX propagation. Want to know why? Ask Larry, WA2ALY !



## Intro to Logbook of the World (LoTW)

Logbook of the World (LoTW) provides these services to every ham around the world at no charge:

- submit your QSOs, confirming them for your QSO partners, and receiving confirmations in return
- view your submitted QSOs to determine whether or not they've been confirmed by your QSO partners
- view your progress towards DXCC, VUCC, WAS, WAZ and WPX awards

ARRL membership is not required to use these services.

A confirmation is the final courtesy of a QSO, so even if you're not personally interested in confirmations or awards, you should submit your QSOs to LoTW so that your QSO partners will receive confirmations.

If you are seeking confirmations, LoTW eliminates the hassle of creating QSL cards or labels and the cost of mailing them to your QSO partners so that they will mail you a QSL card in return. The confirmation process is entirely electronic, conducted over the internet.

If you wish, you can for a fee submit your confirmed QSOs for credit towards the DXCC, VUCC, WAS, WAZ and WPX awards. This is entirely optional, and can be done at any time.

When you first register with LoTW, you will be issued a **Callsign Certificate** in the form of a computer file.

This *Callsign Certificate* specifies the callsign you used when making the QSOs you submit. An **LoTW Web account** will be created for you so that you can view your submitted QSOs and monitor their confirmation status.

The information describing the location from which you were operating is recorded in a **Station Location**.

The ARRL provides a free application called **TQSL** that can:

- request your *Callsign Certificate* from the ARRL
- receive your requested a *Callsign Certificate*, and load it for use when submitting QSOs
- capture location information to create a *Station Location*
- submit a batch of QSOs in an [ADIF](#) or [Cabrillo](#) file to LoTW, using your *Callsign Certificate* to specify the callsign you used to make those QSOs, and your *Station Location* to specify the location from which you made them.